

COSHH Procedure

environment



toxic

highly flammable



harmful

oxidising agent



corrosive

explosive



irritant

serious health hazard



..... a step by step analysis of a job, task or
process which takes into account the hazardous
materials likely to be encountered and the necessary
control measures required to control the risk
including correct PPE & RPE.

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH **(AMENDMENT) REGULATIONS 2004**

As an employer we are required by the COSHH Regulations to provide adequate information to employees to ensure safe use of substances which may cause ill health. Most of the substances this Company use require only basic personal protection, such as eye and hand protection and as necessary, a dust mask.

Operatives need formal instruction and if required, the safety data sheet which comes with every product. This spells out what is required for the safe handling and use is for the substances.

Supervisors should make themselves aware of the requirements, if in doubt, the safety Advisor will advise on requirements. An assessment has been issued to all contracts and this gives guide lines on requirements. A master file is held at Head Office, which is available to employees.

If a new product to the Company is going to be used, then the safety data sheet needs to be assessed first. You should obtain this and make it available to the Safety Advisor.

Summary Coshh exposure matrix

Worker's exposure matrix	Concrete	Cement	Diesel	Mould oils	Release agents	Curing agent	Hydraulic fluid	Mortar	Grout	Waterbar welding	Greases & Oils	RIW (liquid bitumen)	Epoxy resins	Toners (hpto copiers etc)	Engineers spray paint
Site Manager														✓	✓
Foreman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Carpenters	✓	✓		✓	✓	✓				✓			✓		✓
Carpentry Labourers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Steelfixers	✓	✓		✓	✓	✓			✓				✓		
Concrete Labourers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
General Labourers	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Mechanical fitters			✓				✓				✓				

- The workers exposure matrix: This table indicates the likelihood of each trade having significant exposure to the types of standard materials used within the construction industry.
- Individual **Coshh assessments** have been developed for each hazardous materials based upon the hazard data sheet available and the circumstances of use. (see separate sheets)
- The list of materials above and the individuals indicated does not restrict the selection and use of additional materials nor the development of additional **Coshh assessments**.

The following is a guide to basis requirements:-

Concrete Gang	- Eye, ear, hand and feet protection.
Repair Men	- Eye, ear, hand and dust protection. If in a confined space and using mixed chemicals, respiratory equipment will be required.
Mould oils etc.	- Hand and eye protection. Following trades may need protection from over application, use sparingly
Hand mechanical tools	- Eye, hand ear and dust protection.
Waterproofing	- Eye and hand protection. Respiratory protection will be required in confined or enclosed areas.

These operations are an every day pattern of day to day works and can be easily monitored by field supervisors. Storeman shall keep an adequate supply of all necessary protective equipment.

General assessment of possible Health Hazards of Processes

⊙ **Substructure works**

- There may be health risks on sites where contaminated earth may exist. This is normally the concern of the main contractors and any problems unexpectedly encountered on site would be referred to them for their assessment and control.
- A check will be made, before work under our control is started, that a full investigation has been carried out on any site that may have been a dumping ground for waste materials or have been contaminated by industrial activity.
- Ground preparation for concrete Structures may include breaking into hardened old concrete with risk of dust exposure, including quartz dust, for example if part of a floor has been removed. If inhaled in excess quantities over a long period this may cause long term health hazard.

⊙ **Controls**

- It is unlikely that the occupational exposure limit of:
0.3mg/m³ total inhalable dust (8 hour TWA)
0.1mg/m³ total respirable dust (10 mins TWA) for quartz or for dust generally.
5mg/m³ dust or respirable size (8 hour TWA)
15mg/m³ dust or respirable size (10 mins TWA)
or
10mg/m³ total inhalable dust (8 hour TWA)
30mg/m³ total inhalable dust (10 mins TWA)
- Will be exceeded but suitable approved respirators will be needed for this work and every effort made to ensure they are worn.

⊙ **Mould preparation**

- Only soft woods are used in the construction of mould, and the cutting by hand would not give rise to sufficient dust to be a hazard. The occupational exposure standard for airborne softwood dust:-
5mg/m³ (8 hour TWA) (HSE GN EH 40)
- **Control** - Exposure during intermittent hands cutting in the open air is likely to be more than 1/10 of the overall exposure limit. The risk is therefore not sufficient.
- Dust exposure from machine cutting of softwoods is likely to be a much higher level.
- **Control** - Any extensive work, especially in a confined area, would require an integral exhaust system and filter, or at least the use of an approved dust respirator.
- Chemical release agents are used to achieve a clean release and a clean hard finish after the removal of formwork. These are brushed or sprayed onto the mould surface prior to casting. Different types of mould oils are used for different types of concrete. These may be solvent based and have the following risks in use:-
- **Eye contact** - may cause irritation and smarting and should be avoided.
- **Control** - Goggles or face masks suitable for use with chemicals should be used, especially when spraying.
- **Skin contact** - prolonged or repeated contact may cause de-fatting and drying of the skin and give rise to irritation and dermatitis.
- **Control** - Hand protection should be used. PVC/Synthetic rubber gloves are suitable.
- **Inhalation** - over exposure to mists and vapours may cause dizziness, irritation of the eyes, nose, respiratory tract and headaches. In extreme cases of exposure to excessive concentrations, loss of consciousness may result.
- **Control** - Respiratory protection is not normally required in conditions of good general ventilation, but in confined areas where high concentrations may be expected, approved respiratory protection should be provided and used. Monitoring of spraying conditions in a worst situation usage should be carried out to check exposures to the organic solvents used in different manufacturer's products.
- **Indigestion** - swallowing can cause nausea, irritation of mouth and digestive tract and abdominal pain. Aspiration into the lungs can cause intense local irritation of the lung tissue.

⊙ **Cement use & associated products - concrete**

- The vast majority of cement used is wet ready mixed and will present no inhalation risk as it comes ready mixed with additives etc. as required.
- **Control** - Precautions will need to be taken against skin burning, by the use of good quality, suitable clothing and hand protection well maintained.
- Some is mixed on site, and is done outdoors. The amount varies with each job, but is unlikely to take more than an hour a day. It is normally done outdoors or in good ventilation. Airborne cement dust is given off.

- Additives commonly used include:-
 - Epoxy Plus Concrete with the risk of contact with epoxy resin products which are irritant and the alkaline hardener which is corrosive.
 - Control - Barrier creams and protective clothing in good clean conditions are necessary.
- Natural aggregates which may contain respirable dusts including quartz.
- Control - Dust masks to BS2091 Type B or equivalent should be used in enclosed areas where airborne dust is concentrated..
- Coated road material - there are risks from burns from hot materials, chemical burns from contact with coal derived oils, warts from prolonged contact with coal-tar or coal derived oils, and fumes from hot coated material, especially in confined spaces.
- Control - Protective clothing should be worn on hands, arms, legs and feet. Skin contact should be avoided. Hands and exposed skin should be washed before eating or smoking. Fumes should be avoided and suitable respiratory protection worn.
- The main hazards from cement are:-
 - Contact with wet cement mixes can cause skin diseases such as:-
 - Irritant contact dermatitis because of the wetness, alkalinity and abrasiveness.
 - Allergic contact dermatitis because of individual sensitivity to chromium compounds which may occur in cement.
 - Cement burn, a form of skin ulceration which may result from contact with freshly mixed concrete's.
- The main controls are:-
 - Avoid direct skin contact with wet cement, including sitting or kneeling on wet material to prevent contact through contaminated clothing.
 - Use suitable respiratory protection to prevent inhalation of cement dust.
 - Protect eyes from cement dust.
- Concrete repair & grouting etc.
 - A number of proprietary compounds are used for this work. The majority is ready to use and manufacturer's guidance should be followed. The main risks are from exposure to epoxy resin compounds, hardeners and solvents.
 - Control - In most cases the small quantities involved, or the well ventilated areas prevent risk of exposure to levels of solvents, dust or fumes above occupational exposure limits.
 - In more commonly used materials are:-
 - i) Conbextra Epoxy Resin Free-Flow Grout - This is pre mixed in the container, ready to use to avoid skin and eye contact.
 - ii) Adogrout - a possible irritant.
 - iii) Adocure - a possible irritant.
 - iv) Adopak - treat as cement.
 - v) Plascure - a possible irritant.
 - vi) Plasealer - a possible irritant.
 - vii) Split System C-mix - a mixture of polyester resins, fillers and catalysts with no danger unless the cartridge is damaged.

◉ **Plant & equipment – Servicing:**

- Petrol driven engines and generators. The exhaust fumes contain mainly carbon monoxide and carbon dioxide. Care needs to be taken to prevent exposure to the exhaust fumes.
- Carbon Monoxide has an Occupational Exposure Standard of:-
50 ppm in air (8 hour TWA)
100 ppm in air (10 min RWA)
- Carbon Dioxide has an Occupational Exposure Standard of:-
5000 ppm in air (8 hour TWA)
15000 ppm in air (10 min TWA)
(HES GN EH 40)
- The risk can be controlled by ensuring the standard for carbon Monoxide is not exceeded. In the open air this means a person should not stand directly over the exhaust fumes.
- In enclosed spaces the risk is much higher and should be monitored using a chemical indicator tube, if there is any doubt. An adequate supply of fresh air is essential in any situation where exhaust fumes may accumulate.
- Propane gas heaters have in the past been used for heating sheds and offices on building sites, and deaths have resulted from the build-up of carbon monoxide, a product of combustion, and inadequate oxygen supply.
- Controls - It is essential that there is an adequate supply of fresh air wherever such heaters are used, and the products of combustion are vented to the open air.
- Diesel and Gas Oil are used to drive plant, and causes the same exhaust risks as petrol. In addition, they contain polycyclic aromatic hydrocarbons and under conditions of poor personal hygiene and prolonged repeated exposure they have been suspected of causing skin cancer, as well as skin irritation and dermatitis.
- Controls - Impervious gloves should be worn if continued and repeated contact is expected.

FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4

Number of Sheets attached to
this Assessment

2

KEY HAZARDS & CONTROLS IDENTIFIED

- Wet Concrete, Mortar and Screed Are Strong Alkalis which can cause serious burns or ulcerations to the skin or eyes under contact.
- Strong Alkaline solutions tend to damage nerve endings on contact before causing skin damage. Therefore chemical burns can develop without pain being felt at the time.
- Concrete, Mortar and Screed mixes may (until set) cause irritant and allergic contact dermatitis.
- Dry Concrete, screed and mortar contains silica particles which when disturbed... i.e cutting concrete producing dust, Dry mix concrete, etc... can cause respiratory damage.
- PPE is to be worn when mixing, pouring and shaping.
- Long trousers and upper body clothing is to be worn
- Remove wet clothing immediately and launder before re-use.
- Encourage good hygiene whilst working with concrete.

WASH WET CONCRETE FROM SKIN IMMEDIATELY IF CONTACT OCCURS. IRRIGATE EYES WITH COPIOUS WATER OR SALINE SOLUTION FOR TEN MINUTES. SEEK MEDICAL ADVICE.

FIRST AID INSTRUCTIONS	
Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Wash the area thoroughly with soap and water before continuing. If Irritation, Pain or other skin conditions occur, seek medical advice.
Eye Contact	Remove contact lenses, irrigate copiously with fresh clean water for 10 minutes holding eyelids apart seek immediate medical attention
Inhalation	Remove from further exposure to fresh air. If Nose or airways become inflamed, seek medical advice.
Ingestion	If accidentally swallowed DO NOT INDUCE VOMITING. Wash out mouth with plenty of water and give patient plenty to drink. Seek medical attention immediately.

FIRE FIGHTING MEASURES	
Hazard	Measures
Fire	Not Flammable
Stability	Reacts with moisture to become Alkaline
Decomposition Products	

STORAGE AND HANDLING	
Hazard	Measures
Handling and Usage	Avoid skin and eye contact. Risks are worsened if the material is allowed to rub against the skin,, such as inside boots or gloves. Do not kneel or sit on the wet materials without correct PPE. Keep dusts from cutting to a minimum and use respiratory protection where exposure is expected. Handle dry mix bags with care. Adhere to Manual handling regulations.
Storage	Dry mix concrete and mortar bags should be kept stacked safe in a stable manner away from moisture.

DISPOSAL MEASURES	
Hazard	Measures
Not Hazardous	Can be disposed of as general waste.

ACCIDENTAL RELEASE MEASURES	
Hazard	Measures
Prevent from entering Drains, Sewers or Water courses.	Clear up by mechanical/manual means into container.

MANUFACTURERS INFORMATION	
Manufacturers Name and Address	CEMEX UK Operations Ltd CEMEX House Evreux Way Rugby Warwickshire CV21 2DT
Manufacturers Health & Safety Data Sheet Reference	
24 Hour Emergency Telephone Number	01788 517 000 01932 568 833 (out of hours)
Regulatory Information: Warning Label Phrases	See below

Reference:

CLASSIFICATION: IRRITANT

May cause sensitisation by skin contact

Risk of serious damage to eyes

Contact with wet cement, Mortar or screed may cause irritation dermatitis or burns

Contact between cement powder and bodily fluids (i.e. sweat and eye fluid) may cause skin and respiratory irritation, dermatitis or burns.

Contains Chromium, may cause allergic reaction.

Avoid Skin and eye contact by wearing suitable eye protection clothing and gloves

Avoid breathing dust

Keep out of reach of children

On contact with eyes or skin, rinse immediately with plenty of clean water and seek medical advice after eye contact



Material Safety Datasheet

READY-MIXED CONCRETE, MORTAR & SCREED

It is important that you, or any persons working for you or to whom you have supplied ready-mixed concrete, mortar or screed, become familiar with the information given on both pages of this datasheet before handling, using or disposing of the product(s).

Ready-mixed concrete, mortar & screed

1. Identification of substance/preparation and company

Company: CEMEX UK Operations Ltd
CEMEX House, Evreux Way
Rugby, Warwickshire CV21 2DT
Tel: 01788 517000 (out of hours 01932 568833)
Fax: 01788 517009

Product: Ready-mixed Concrete
Ready-mixed Mortar
Ready-mixed Screed
Dry Silo Mortar
Bagged Ready-mixed Concrete (addition of water required)
Bagged Ready-mixed Mortar (addition of water required)

Revision date: March 2009

Hazard information

2. Composition/information on ingredients

Concrete: Mixture of natural aggregates, cement and water. Other ingredients may include admixtures, Fly Ash and Ground Granulated Blast-furnace Slag (GGBS). Such additions are made to alter/improve the working characteristics of the material or to affect/enhance its properties once hardened.

Mortar: Mixture of natural aggregates, cement and water. Admixtures, hydrated lime and/or pigments may be added.

Screed: Mixture of natural aggregates, cement and water. Admixtures, hydrated lime and/or pigments may be added.

Supaflo: Mixture of natural aggregates, calcium sulphate and water.

- 2.1 Chemical description:
The principal constituents of cement are calcium silicates, aluminates, and sulphates. Small amounts of alkalis, lime and chlorides are also present. Whilst reducing agents are added to comply with the regulatory limit for Chromium (VI) their effect decreases with time and hexavalent chromium salts may be present, which give rise to a potentially hazardous solution when mixed with water. Additional constituents may also be present e.g. fly ash, limestone, clay and granulated blast furnace slag along with other minor chemical additives. The natural aggregates in concrete contain a combination of various minerals, including silica.
- 2.2 Hazardous ingredients:
- The lime, calcium silicates and alkalis within the cement are partially soluble and when mixed with water will give rise to a potentially hazardous alkaline solution.
 - Hexavalent chromium salts in the cement are soluble and when mixed with water, will give rise to a potentially hazardous solution.
 - Salts of organic acid within the air entraining agents are soluble and when mixed with water will contribute to the alkalinity of the solution.
 - Airborne dust from the natural aggregates in dry concrete mixes may contain respirable silica. Long-term prolonged exposure to high levels of respirable crystalline silica, which can arise from a failure to implement adequate control measures, can lead to silicosis and ultimately an increased risk of developing lung cancer.

3. Hazards identification

- 3.1 Wet concrete, mortar and screed are strong alkalis. If this comes into contact with the eyes or skin it may cause serious burns and ulceration. The eyes are particularly vulnerable and damage will increase with contact time. Strong alkaline solutions in contact with the skin tend to damage the nerve endings first before damaging the skin, therefore chemical burns can develop without pain being felt at the time.
- 3.2 Concrete, mortar and screed mixes may until set cause both irritant and allergic contact dermatitis:
- Irritant contact dermatitis is due to a combination of the wetness, alkalinity and abrasiveness of the constituent materials
 - Allergic contact dermatitis is caused mainly by the sensitivity of an individual's skin to hexavalent chromium salts

- 3.3 Concrete, mortar and screed dust:
Inhalation of silica particles in dust created by dry-mix bagged products, cutting set concrete or surface treatment of hardened concrete containing high silica aggregates may cause respiratory damage. Long-term prolonged exposure to high levels of respirable crystalline silica, which can arise from a failure to implement adequate control measures or wear the correct respiratory protection, can lead to silicosis and ultimately an increased risk of developing lung cancer.

Emergency action

4. First aid measures

Wet concrete, mortar & screed:

- 4.1 Eye contact:
Irrigate immediately with copious amounts of clean water. Seek immediate medical attention.
- 4.2 Skin contact:
Immediately wash with copious amounts of clean water. Clothing contaminated by wet cement, concrete or mortar should be removed and washed thoroughly before use.
- 4.3 Ingestion:
Wash out mouth and drink plenty of water. Do not induce vomiting. Seek medical advice if large amount is swallowed.

Concrete, Mortar and Screed dust:

- 4.4 Eye contact:
Irrigate immediately with copious amounts of clean water. Seek immediate medical attention.
- 4.5 Skin contact:
Wash the affected area thoroughly with soap and water before continuing. If irritation, pain or other skin conditions occur, seek medical advice.
- 4.6 Ingestion:
Do not induce vomiting. Wash out mouth with water and give patient plenty of water to drink.
- 4.7 Inhalation:
If irritation occurs, move to fresh air. If nose or airways become inflamed seek medical advice.

WARNING

WET CEMENTITIOUS PRODUCTS such as concrete, mortar and screed MAY CAUSE SERIOUS BURNS in contact with eyes or skin.
You MUST wear the appropriate protective clothing at all times.

5. Fire fighting measures

Concrete, Mortar and Screed are not flammable and will not facilitate combustion with other materials.

6. Accidental release measures

- 6.1 Personal Precautions (See 8.3.)
- 6.2 Cleaning Up:
Recover bulk spillage without delay and, for wet mixes, while material is still in non-hardened (plastic) state, using suction system or mechanical shovel. The product can be slurried by the addition of water but will subsequently set as a hard material. Keep children away from clean up operation.
- 6.3 Environmental Measures:
Prevent from entering drains, sewers or water courses.

Precautions

7. Storage & handling

- 7.1 Storage:
Dry mix concrete and mortar bags should be stacked in a safe and stable manner, away from any moisture.
- 7.2 Handling:
- Wet Concrete, Mortar and Screed:
Avoid skin and eye contact. The risks of dermatitis and burns are increased if the material is allowed to continue rubbing against the skin (e.g. inside boots, in gloves or through saturated clothing). Do not kneel or sit on the wet materials without the correct personal protective clothing, (see 8.3).
 - Concrete, Mortar and Screed dust:
The creation of dust from the cutting or surface treatment of hardened concrete should be kept to a minimum, with work methods and engineering control measures being used to reduce exposure. It is also strongly advised to use respiratory protective equipment in such circumstances.
 - Bagged dry-mix concrete and mortar:
When handling bags take care when lifting, due regard should be paid to the risks outlined in the Manual Handling Operations Regulations 1992. Some bags may have a small amount of cement on the outer surface. Appropriate personal protective clothing (see 8.3) should therefore be used whilst handling.

8. Exposure controls/personal protection

- 8.1 Workplace Exposure Limits:
Workplace Exposure Limits (WELs) of 10mg/m³ total inhalable dust and 4mg/m³ respirable dust (8 hour TWA) are listed in EH40 for calcium silicate, pulverised fuel ash and limestone. WELs of 0.05mg/m³ and 0.1mg/m³ are listed for Chromium (VI) compounds and respirable silica respectively (8 hour TWA).
- 8.2 Engineering Measures:
Where reasonably practicable dust exposures should be controlled by engineering methods, such as local exhaust ventilation.
- 8.3 Personal Protective Equipment:
- a. Respiratory Protection:
Suitable respiratory protection (HSE approved standard) should be worn to ensure that personal exposure is less than the workplace exposure limit values.
- b. Hand and Skin Protection:
Protective clothing should be worn which ensures that concrete, mortar or screed, does not come into contact with the skin. In some circumstances such as when laying concrete, waterproof gloves, waterproof trousers and boots may be necessary, also knee pads if kneeling down to finish a surface. Particular care should be taken to ensure that wet concrete does not enter the boots and persons do not kneel on the wet concrete so as to bring the wet concrete into contact with unprotected skin. Should wet concrete, mortar or screed get inside boots, gloves or other protective clothing then this protective clothing should be immediately removed and the skin thoroughly washed as well as the protective clothing/footwear.
- c. Eye Protection:
Dust-proof goggles (HSE approved standard) should be worn whenever there is a risk of cement powder or any cement/water mixture entering the eye. Suitable protection is advisable where there is a risk of material splashing.

Product information

9. Physical & chemical properties

Detailed properties vary according to:

- The specific concrete, mortar or screed and
- The ingredients added to affect the working characteristics of the material

All mixes are:

- Abrasive
- Alkaline (typically pH10-14)

9.1 Physical Data:

Physical state	Particulate	
Mean particle size	1 – 100 microns (concrete/mortar)	
Odour	N/A	
pH	pH of wet concrete/mortar 9 – 12	
Viscosity	N/A	
Freezing point	N/A	
Boiling point	N/A	
Melting point	N/A	
Flash point	N/A (not flammable)	
Explosive properties	N/A	
Typical densities	Concrete 2000 – 2500kg/m ³	Mortar 1800 – 2200kg/m ³
Dry Bulk Density	1100 - 1600kg/m ³	
Solubility	N/A	

10. Stability & reactivity

Reacts with moisture to become alkaline.

11. Toxicological information

11.1 Short Term Effects:

- Eye Contact:
Mild exposure can cause soreness. Gross exposures or untreated mild exposures can lead to chemical burning and ulceration of the eye.
- Skin:
(Short-term exposure) May cause alkali burns; may cause acute allergic dermatitis in people sensitised to chromium compounds.
(Chronic long-term exposure) May cause irritant contact dermatitis; may lead to sensitisation of the skin to chromium compounds.
- Ingestion:
The swallowing of small amounts of any cement/water mixtures is unlikely to cause significant reaction. Large doses may result in irritation to the gastro intestinal tract.
- Inhalation:
Cement powder may cause inflammation of mucous membranes. Inhalation of large quantities of dust or dust containing respirable silica (generated by cutting, drilling, etc.) may cause progressive lung damage, leading to permanent disability and, in extreme cases, to premature death.

11.2 Chronic Effects:

Skin exposure has been linked to allergic (chromium) dermatitis. Allergic dermatitis more commonly arises through contact with cement/water mixtures than dry cement or dry pre-mixed concrete or mortars. Long term exposure to silica dust may cause silicosis and lead to an increased risk of developing lung cancer.

12. Ecological information

12.1 Aquatic Toxicity Rating:

LC50 aquatic toxicity rating not determined. No data is available on the preparations themselves. When used as intended, no environmental impact is anticipated. If spillage occurs, do not allow material to enter drains, sewers or water courses.

12.2 Biological Oxygen Demand (BOD):

Not applicable

13. Disposal considerations

Not hazardous. However, disposal subject to local authority current requirements / regulations. Keep out of reach of children.

Product information

14. Transport information

Not hazardous. Classification for conveyance – not required.

15. Regulatory information

15.1 Chemicals (Hazard Information and Packaging for Supply) Regulations.

Classification: Irritant.

15.2 Risk/safety phrases:

Risk Phrases:

- May cause sensitisation by skin contact
- Risk of serious damage to eyes
- Contact with wet cement, mortar or screed may cause irritation, dermatitis or burns
- Contact between cement powder and bodily fluids (e.g. sweat and eye fluid) may also cause skin and respiratory irritation, dermatitis or burns
- Contains Chromium (VI) may cause allergic reaction

Safety Phrases:

- Avoid eye and skin contact by wearing suitable eye protection, clothing and gloves
- Avoid breathing dust
- Keep out of reach of children
- On contact with eyes or skin, rinse immediately with plenty of clean water. Seek medical advice after eye contact

16. Legislation & other information

- CONIAC Health Hazard Information Sheet No 26 (CEMENT)
- Health & Safety at Work, etc. Act 1974
- Consumer Protection Act 1987
- Control of Substances Hazardous to Health Regulations (COSHH) 2002
- Control of Substances Hazardous to Health (Amendment) Regulations 2004
- Construction (Design & Management) Regulations 1994
- Environmental Protection Act 1990
- HSE Guidance Note EH40 (Workplace Exposure Limits).
- Any authorised manual on First Aid by St.John's/St.Andrews/ Red Cross
- Manual Handling Operations Regulations 1992 (as amended)

Prepared in accordance with UK REACH Competent Authority Information Leaflet 13 – REACH and SDS – May 2008.

Guidance references

Available from HMSO, HSE area offices, or local authority Environmental Health Departments:

- EH40/: Workplace Exposure Limits
- A step-by-step guide to COSHH Assessment (HS[G]97)

IMPORTANT NOTES

The purpose of this datasheet is to provide Health, Safety and Environmental guidance on the safe handling, use and disposal of ready-mixed Concrete, Mortar and Screed supplied by subsidiary or affiliate companies of CEMEX in the United Kingdom.

The information contained in this datasheet is correct at the date of, and applies only in relation to, the supply of material referred to in the delivery docket to which this datasheet is attached and forms part.

This datasheet should alert purchasers and/or users to the usual hazards in handling the supplied material when using it within the ordinary range of uses for which such material is normally supplied. If you have purchased or arranged the supply on behalf of a third party who will work with the material supplied it is your duty to pass this information on to them BEFORE such work commences.

For the avoidance of doubt the datasheet DOES NOT constitute the user's own assessment of workplace risk as may be required by other safety legislation and nothing herein shall be construed or relied upon as relieving the purchaser, user or any intermediate supplier or third party from any statutory or other legal duty which may apply to them or from taking care or precautions to protect themselves or others to whom they owe a duty of care.

The datasheet should not be relied upon for any other purpose including without limitation any technical or design purpose, nor relied upon in the use or handling of any other product whether supplied by CEMEX or not. Reliance placed on any part or all of the information contained in this datasheet which goes beyond the purpose set out above is entirely at the user's own risk.

Without limiting or restricting the terms and conditions upon which the material has been supplied by CEMEX, to the extent permitted by law, disclaims all liability arising directly or indirectly from the content or preparation of this datasheet except that CEMEX will accept responsibility for personal injury which is demonstrated to have been caused by its own negligence.

For further information please contact
Customer Services on:

Tel: 01788 517000
(out of hours) 01932 568833
Fax: 01788 517009

Email: gb-enquiries@cemex.com

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CosHH Assessments & Arrangements

Page 12 of 84
Revision 'O'

Uniclass L621:C506	EPIC F2112:Y44	Jan 05
CI/SfB	Eq2	(U47)

Health and Safety data sheet



Health & Safety guidelines for the use of:

- Portland Cements
- Calcium Aluminate Cement
- Portland – Fly Ash Blended Cements
- Geo-Environmental Cements
- Readybag Products

1. Identification of substance

An odourless white to grey powder insoluble in water. When water is added it becomes a binder for construction applications. This data sheet applies to the following cements: Castle Multicem; Castle Ordinary Portland Cement (OPC); Castle Rapid Hardening Portland Cement (RHPC); Castle Sulfate-resisting Portland Cement (SRPC); Castle White Portland Cement; Castle Masonry Cement; Castle Quickcem; Castle High Alumina Cement; Castle Portland Limestone Cement; Castle Portland – Fly Ash Cement; Castle General Purpose Grouts; Castle Depocrete; Castle Protomix; Castle Readybag Fine Concrete General Purpose Mix, Castle Readybag Coarse Concrete General Purpose Mix, Castle Readybag Fine Concrete 40N Mix, Castle Readybag Coarse Concrete 40N Mix, Castle Readybag Concrete Post Mix, Castle Readybag Mortar General Purpose Mix, Castle Readybag Limecem Mortar Professional Mix and Castle Readybag Mortar Patio Slab Mix.

2. Supplier/manufacturer

Castle Cement Limited
Park Square
3160 Solihull Parkway
Birmingham Business Park
Birmingham B37 7YN

Castle Cement Technical Helpline
tel: 0845 722 7853
fax: 01780 727154
e-mail: technical.help@castlecement.co.uk

3. Composition/information on ingredients

3.1 Chemical description

The principal constituents of these cements are calcium silicates, aluminates, ferro-aluminates and sulfates. Small amounts of alkalis, lime, magnesia and chlorides are also present together with trace amounts of chromium compounds.

Additional constituents may also be present e.g. pulverised-fuel ash, limestone, clay and granulated blastfurnace slag. Castle Multicem, Castle Masonry Cement and Castle Readybag Limecem Mortar Professional Mix also contain an air entraining agent and Castle Masonry Cement contains up to 25% filler material. CAS: 659971-15-1.

3.2 Hazardous ingredients

- a) The lime, calcium silicates and alkalis within the cement are partially soluble and when mixed with water will give rise to a potentially hazardous alkaline solution.
- b) Soluble chromium (VI) in these cements are soluble and when mixed with water will give rise to a potentially hazardous solution.

4. Hazards identification

4.1 When cement is mixed with water such as when making concrete or mortar, or when the cement becomes damp, a strong alkaline solution is produced. If this comes into contact with the eyes or skin it may cause serious burns and ulceration. The eyes are particularly vulnerable and damage will increase with contact time. Strong alkaline solutions in contact with the skin tend to damage the nerve endings first before damaging the skin, therefore chemical burns can develop without pain being felt at the time.

4.2 Cement, mortar and concrete mixes may, until set, cause irritant dermatitis:

- Irritant contact dermatitis is due to a combination of the wetness, alkalinity and abrasiveness of the constituent materials.

If used outside of the declared shelf life, there may be a risk of allergic dermatitis.

- Allergic dermatitis is caused mainly by the sensitivity of an individual's skin to soluble chromium (VI).

5. First aid measures

5.1 Eye contact

A speedy response is essential in order to avoid permanent damage to the eyes. Wash eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice without delay.

5.2 Skin contact

Wash the affected area thoroughly with soap and water before continuing. If irritation, pain or other skin trouble occurs, seek medical advice. Clothing contaminated by wet cement, concrete or mortar should be removed and washed thoroughly before use.

5.3 Ingestion

Do not induce vomiting. Wash out mouth with water and give patient plenty of water to drink.

5.4 Inhalation

If irritation occurs, move to fresh air. If nose or airways become inflamed seek medical advice.

6. Fire-fighting measures

6.1 Cements are not flammable and will not facilitate combustion with other materials.

7. Accidental release measures

7.1 Personal precautions

See 9.4

7.2 Cleaning up

Recover the spillage in a dry state if possible. Minimise generation of airborne dust. The product can be slurried by the addition of water but will subsequently set as a hard material. Keep children away from clean up operation.

8. Storage and handling

8.1 Storage

Bulk cement must be stored in silos that are waterproof, clean and protected from contamination, dry (internal condensation minimised) with stock rotated in chronological order of the despatch dates marked on delivery tickets.

Packed products must be stored in unopened bags clear of the ground in cool, dry conditions and protected from excessive draught.

Bags should be stacked in a safe and stable manner.

8.2 Handling

When handling cement bags, due regard should be paid to the risks outlined in the Manual Handling Operations Regulations. Some bags may have a small amount of cement on the outer surface. Appropriate personal protective clothing (see 9.4) should therefore be used whilst handling.

9. Exposure controls/personal protection

9.1 Occupational Exposure Limit (OEL)

OEL 8hr Time Weighted Average (TWA)
10mg/m³ total inhalable dust
4mg/m³ respirable dust

9.2 Engineering measures

Where reasonably practicable dust exposures should be controlled by engineering methods.

9.3 Stock control

Castle Cement treats all affected cements with a reducing agent to protect the end-user against the effects of soluble chromium (VI). Note: However, the reducing agent is only guaranteed to offer protection during the declared shelf life of the product. Thereafter, there may be a risk of allergic dermatitis. Therefore, using cement within its shelf life offers the best protection against allergic dermatitis.

9.4 Personal protective equipment

- a) Respiratory protection – suitable respiratory protection should be worn to ensure that personal exposure is less than the OEL.
- b) Hand and skin protection – protective clothing should be worn which ensures that cement, or any cement/water mixture, e.g. concrete or mortar, does not come into contact with the skin. In some circumstances such as when laying concrete, waterproof trousers and wellingtons may be necessary. Particular care should be taken to ensure that wet concrete does not enter the boots and persons do not kneel on the wet concrete so as to bring the wet concrete into contact with unprotected skin. Should wet mortar or wet concrete get inside boots, gloves or other protective clothing then this protective clothing

should be immediately removed and the skin thoroughly washed as well as the protective clothing/footwear.

- c) Eye protection – dust-proof goggles should be worn wherever there is a risk of cement powder or any cement/water mixture entering the eye.

10. Physical/chemical properties

10.1 Physical data

Physical state	Particulate
Mean particle size	5-30 microns
Odour	Not Applicable (N/A)
pH	pH of wet cement 11-14
Viscosity	N/A
Freezing point	N/A
Boiling point	N/A
Melting point	N/A
Flash point	N/A (not flammable)
Explosive properties	N/A (not explosive)
Density	2750-3200kg/m ³
Solubility	N/A

10.2 Chemical compounds

Mainly a mixture of:	3 CaO – SiO ₂
	2 CaO – SiO ₂
	3 CaO – Al ₂ O ₃
	4 CaO – Al ₂ O ₃ – Fe ₂ O ₃
	CaSO ₄
	MgO

Contains less than 1% crystalline silica.

11. Stability and reactivity

Conditions contributing to chemical instability: none
Hazardous decomposition products: none
Special precautions: none

12. Toxicological information

12.1 Short term effects

- a) Eye contact – cement is a severe eye irritant. Mild exposure can cause soreness. Gross exposures or untreated mild exposures can lead to chemical burning and ulceration of the eye.
- b) Skin contact – cement powder or any cement/water mixture may cause chemical burns and/or irritant contact dermatitis. If used outside of the declared shelf life, there may be risk of allergic dermatitis.
- c) Ingestion – the swallowing of small amounts of cement or any cement/water mixtures is unlikely to cause any significant reaction. Larger doses may result in irritation to the gastrointestinal tract.
- d) Inhalation – cement powder may cause inflammation of mucous membranes.

12.2 Chronic effects

High repeated exposures in excess of the OEL have been linked with rhinitis and coughing. Skin

exposure to cement outside of its declared shelf life may cause allergic dermatitis. Allergic dermatitis more commonly arises through contact with cement/water mixtures than dry cement.

13. Ecological information

13.1 Aquatic toxicity rating

LC50 aquatic toxicity rating not determined. The addition of cements to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

13.2 Biological Oxygen Demand (BOD)

Not applicable.

14. Disposal considerations

Dispose of empty bags or surplus cement to a place authorised to accept builders' waste. Keep out of the reach of children.

15. Transport information

Classification for conveyance – not required.

16. Regulatory information

16.1 Chemicals (Hazard Information & Packaging) Regulations

Classification – Irritant.

16.2 Risk/safety phrases

Risk phrases

- Risk of serious damage to eyes.
- Contact with wet cement, wet concrete or wet mortar may cause irritation, dermatitis or burns.
- Contact between cement powder and body fluids (e.g. sweat and eye fluid) may also cause skin and respiratory irritation, dermatitis or burns.
- Contains chromium (VI). May produce an allergic reaction.

Safety phrases

- Avoid eye and skin contact by wearing suitable eye protection, waterproof clothing, waterproof footwear and waterproof gloves.
- Clothing contaminated by wet cement should be removed immediately and washed before re-use.
- Avoid breathing dust.
- Keep out of reach of children.
- On contact with eyes or skin, rinse immediately with plenty of clean water. Seek medical advice after eye contact.

17. Legislation and other information

- CONIAC Health Hazard Information Sheet No. 26 (CEMENT)
- Health and Safety at Work etc Act 1974
- Control of Substances Hazardous to Health (Regulations)
- PORTLAND CEMENT DUST – criteria document for an occupational exposure limit. June 1994 (ISBN 07176 – 0763 – 1)
- HSE Guidance Notes EH26 (Occupational Skin Diseases – Health and Safety Precautions)
- HSE Guidance Note EH40 (Occupational Exposure Limits)
- Any authorised manual on First Aid by St. John's/St. Andrew's/Red Cross
- Manual Handling Operations Regulations
- Environmental Protection Act

Multicem, Quickem and Readybag are registered trademarks owned by Castle Cement Limited.

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L006(Sa)/01/05/pdf

Ready Mixed Concrete: Health & Safety Data Sheet

COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures of aggregates, cement and water. Other ingredients may include Ground Granulated Blast furnace slag (GGBS), Pulverised Fuel Ash (PFA) and admixtures. Such additions are made to alter/improve the properties of the concrete in the plastic or hardened state.

HAZARDS IDENTIFICATION

Wet Concrete

Contact with eyes may cause severe irritation and/or alkali burns.

Skin contact may result in irritant contact dermatitis and/or ulceration due to the combination of wetness, alkalinity and abrasiveness of the cement mixture.

Allergic Contact Dermatitis may be caused by individual sensitivity to chromium compounds, which occur in cement.

Dry Concrete

Inhalation of silica particles in dust caused by cutting/surface treatment of hardened concrete may cause respiratory damage.

FIRST AID MEASURES

Wet Concrete

Eye Contact: Irrigate eyes immediately with clean water for at least 10 minutes. Seek immediate medical attention.

Skin Contact: Wash thoroughly with clean water as soon as contamination occurs.

Note: This includes contact through contaminated clothing.

Dry Concrete

Eye Contact: Irrigate eyes immediately with clean water. Seek medical attention.

Skin Contact: Wash thoroughly with clean water.

Ingestion: Drink plenty of water and seek medical attention.

FIRE FIGHTING MEASURES

No fire or explosive hazard.

ACCIDENTAL RELEASE MEASURES

Personal Protection: Avoid contact with skin or eyes. Wear impervious protective clothing.

Environmental Measures: Prevent from entering watercourses, drains or sewers.

Method of Cleaning: Any spillage should be recovered immediately while material is still plastic and area washed thoroughly if applicable.

HANDLING AND STORAGE

Wet Concrete

Avoid direct skin and eye contact. Do not sit/kneel on wet concrete.

Dry Concrete

Minimise creation of dust wherever possible.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Wet Concrete

Hand Protection: Wear suitable impervious gloves.

Eye Protection: Suitable eye protection is strongly recommended where there is a risk of accidental splashing.

Skin Protection: Long sleeved clothing, full-length. Wear trousers and impervious safety boots.

Dry Concrete

Occupational Exposure Standards (OES), or Maximum Exposure Limits (MEL), for inhalants and respirable dusts are set by the Health & Safety Commission.

These are published annually in HSE Guidance Note EH40. The following limits (8 hour time-weighted averages) are given in EH40/99.

Total Inhalable Dust 10mg/m³ OES

Respirable Dust 4 mg/m³ OES

Respirable Crystalline Silica 0.3mg/m³ MEL.

Engineering Control Measures: Containment and local exhaust ventilation where airborne dust is likely to reach exposure limits.

Respiratory Protection: Suitable respiratory protective equipment to HSE approved standard if engineering control measures are insufficient.

Hand Protection: Abrasive resistant gloves.

Eye Protection: Goggles to approved HSE Standard.

PHYSICAL & CHEMICAL PROPERTIES

Detailed properties vary according to specific mix however, all concretes are:

- Abrasive.
- Alkaline (typically pH value 10 - 14).

STABILITY AND REACTIVITY

No safety issues relating to stability and reactivity of product under normal conditions.

TOXICOLOGICAL INFORMATION

Wet Concrete

Eye Contact: May cause irritation or alkali burns.

Skin Contact: May cause alkali burns and acute allergic dermatitis in people sensitised to chromium compounds. Long term exposure may cause irritant contact dermatitis, which can lead to sensitisation of the skin to chromium compounds.

Dry Concrete

Eye Contact: May cause transient irritation.

Skin Contact: No harm likely.

Inhalation: Inhalation of large quantities of dust may cause lung damage and in extreme cases may lead to premature death.

Ingestion: No harm likely.

ECOLOGICAL INFORMATION

When used as intended no environmental impact is anticipated.

Do not allow material to enter watercourses, drains or sewers.

DISPOSAL CONSIDERATIONS

Non-hazardous. Disposal subject to Local Authority requirements and regulations.

TRANSPORT INFORMATION

Special Carriage Precautions: Nil. No vehicle labelling required.

REGULATORY INFORMATION

Chemicals (Hazard Information and Packaging for Supply) Regulations 1997. Danger Classification: Irritant (+ hazard symbol) R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

S24 Avoid contact with skin.

S25 Avoid contact with eyes.

S26 If contact with eyes rinse immediately with clean water and seek medical advice.

Statutory - Health & Safety at Work Act 1974 - Consumer Protection Act 1987 - Environmental Protection Act 1990 - P.P.E Regulations 1992 - COSHH Regulations 1994

FURTHER INFORMATION SOURCES:

Health & Safety Department
Aggregate Industries UK Ltd
Bardon Hill, Coalville
Leicestershire LE67 1TL
Tel: 01530 510066
Fax: 01530 510123
www.aggregate.com

LEGAL NOTICE

The information contained in this Safety Data Sheet was considered the best available at the date of issue. However, no warranty is made or implied that the information is accurate or complete. It is the user's obligation to evaluate and use this product safely and to comply with European and regulations.







NAME OF HAZARDOUS SUBSTANCE USED OR CREATED (describe use or application)
Silica Dusts

COSHH Number 007

page 1

Assessment By	Activity	GJH	Assessment Date
	Cutting masonry and stone.		
	Persons/Groups at Risk		
	Site Operatives - Laborers etc		

HOW IS IT HAZARDOUS			
CLASSIFIED AS Harmful	Symbol: Si	R values: R48/20 - R40/20	S values: S22 / S28

					
FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES	YES	YES	YES	YES	YES
NO	NO	NO	NO	NO	NO
				X	
	X		X		X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in appropriate boxes

		YES	NO
Is Manufacturers Safety Data Sheet attached?	Attach Sheet if YES		X
Are Specific Safety Precautions required in the use of the Substance?	Provide details if YES	X	
Will employees be given specific training? ie TBT or specialist training	Attach details if YES		X
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards		
RPE / Masks	BS EN149	X	
Goggles or Spectacles	BS EN 166b	X	
Gloves, Rubber chemical proof	BS EN420	X	
Boots / Footwear	BS EN345 S5		X
Overalls			
Other Equipment	Attach details if YES	X	
Will Exposure Monitoring and /or Health Surveillance ?	Attach details if YES		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?			X
Have all necessary First-aid requirements been provided?		X	
Have Storage requirements for the substance been provided/arranged on site?		X	
FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4	Number of Sheets attached to this Assessment		2

KEY HAZARDS & CONTROLS IDENTIFIED

- **DO NOT Dry cut stone with abrasive wheel**
- **Prolonged exposure may cause Silicosis and cancer.**
- **Always use water suppression dampening to improve cut and eliminate risk of dust inhalation**
- **Always cut / dress stone in well ventilated work areas**
- **Always wear eye protection to BS EN166 grade b**
- **Always wear suitable gloves, abrasive resistant**
- **Only competent operator to use Abrasive wheels and exchange blade**
- **Dry silica dust becomes alkaline when Wet. Mixtures with body fluids i.e. sweat can lead to skin burns and ulcerations. Always keep good hygiene and remove contaminated clothing immediately.**

OTHER PPE IS TO INCLUDE HEARING PROTECTION WHERE NECESSARY. CUTTING OF STONE PRODUCES HIGH LEVELS OF NOISE, LIKELY TO BE ABOVE THE SECOND ACTION LEVEL OF 85 dBA as stated in the noise at work regulations 2005.

FIRST AID INSTRUCTIONS	
Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Minor – may cause skin abrasions. However when wet can cause skin burns and ulceration. wash skin with soap and water after contact. Remove contaminated clothing. Get medical attention promptly if symptoms occur after washing.
Eye Contact	Remove contact lenses, irrigate immediately with fresh clean water for a minimum of 15 minutes holding eyelids apart. DO NOT RUB. Seek medical advice if symptoms persist
Inhalation	Remove to fresh air. Prolonged exposure may cause Silicosis and cancer – always use water dampening.
Ingestion	May cause choking in large quantities. Rinse mouth with plenty of water. Seek medical attention immediately. No known health effects.

FIRE FIGHTING MEASURES	
Hazard	Measures
Fire	Will not burn.
Stability	
Decomposition Products	

STORAGE AND HANDLING	
Hazard	Measures
Handling and Usage	Wear appropriate PPE for the task. Observe Manual handling regulations and best practices.
Storage	No special storage requirements.

DISPOSAL MEASURES	
Hazard	Measures
HARMFUL	Dispose of as No-Hazardous Builders waste.

ACCIDENTAL RELEASE MEASURES	
Hazard	Measures
Do not allow silt up local water courses, drains etc.	Dampen first, then shovel and dispose of as non-hazardous builders waste.

MANUFACTURERS INFORMATION	
Manufacturers Name and Address	TBA
Manufacturers Health & Safety Data Sheet Reference	TBA
24 Hour Emergency Telephone Number	TBA
Regulatory Information: Warning Label Phrases	See below

Reference:







NAME OF HAZARDOUS SUBSTANCE USED OR CREATED (describe use or application)
DIESEL / FUEL OIL – Fuel for Engines

COSHH Number 001

page 1

Assessment By	Activity	GJH	Assessment Date
	Re-Fueling engines and storage containers		
Persons/Groups at Risk			
Site Operatives – Fueling operatives			

HOW IS IT HAZARDOUS			
CLASSIFIED AS Harmful/ Dangerous to Environment	Symbol: Xn N	R values: R40, R65 R66, R5 1/53	S values: S2, S36/37, S61, S62

					
FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES	YES	YES	YES	YES	YES
NO	NO	NO	NO	NO	NO
X	X	X	X	X	X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in
appropriate boxes

	YES	NO
Is Manufacturers Safety Data Sheet attached?	X	
Are Specific Safety Precautions required in the use of the Substance?	X	
Will employees be given specific training? ie TBT or specialist training		X
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards	
RPE / Masks	X	
Goggles or Spectacles	X	
Gloves, Rubber chemical proof	X	
Boots / Footwear	X	
Overalls		
Other Equipment		
Will Exposure Monitoring and /or Health Surveillance ?		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?	X	
Have all necessary First-aid requirements been provided?	X	
Have Storage requirements for the substance been provided/arranged on site?	X	
FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4	Number of Sheets attached to this Assessment 10	

KEY HAZARDS & CONTROLS IDENTIFIED

- Can release vapours that readily form flammable mixtures.
- Vapour accumulations can flash or explode.
- May cause lung damage if swallowed
- Repeat exposure may cause skin dryness or cracking
- May be irritating to the eyes, nose throat and lungs
- High pressure injection under the skin may cause serious damage.
- Do not use as a cleaning agent or other use than intended.
- Do not siphon by mouth
- Ensure that all operatives carrying out refuelling are trained in local spillage procedures(including safe use of spill kits)
- Ensure PPE is worn when refuelling (impervious gloves, eye protection)
- Common sense always to prevail when using substances.
- Mobile fuel tanks must be “bunded”
- All refuelling to take place at designated point only.
- Ensure the equipment to be refuelled is switched off.
- Ensure that there are no naked flames-hot works in the vicinity of the refuelling area, No Smoking whilst refuelling.
- Ensure that a spill tray is in place to minimize spillage.
- On completion of refuelling replace nozzle in bunded / secure housing to minimize spillage.
- Ensure refuelling pipe is not leaking.
- **POSSIBLE IRRIVERSABLE EFFECTS FOLLOWING PROLONGED AND REPEATED SKIN EXPOSURE. MAY ENTER LUNGS AND CAUSE DAMAGE IF SWALLOWED. MAY CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT, HYDROGEN SULPHIDE MAY BE RELEASED WHEN HEATED, EXPOSURE TO VAPOUR / MIST MAY CAUSE DIZZINESS AND DROWSINESS.**

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Remove contaminated clothing, Dry wipe exposed skin and cleanse with waterless hand cleaner followed by thorough washing with soap and water. For those giving assistance, avoid contact by wearing impervious gloves. If Injection under the skin has occurred, seek emergency medical advice regardless of the appearance of the wound.
Eye Contact	Remove contact lenses, irrigate copiously with fresh clean water for 10 minutes holding eyelids apart seek medical advice if irritation occurs
Inhalation	Remove to from further exposure. For those providing assistance, avoid exposure. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs seek immediate medical assistance. If breathing has stopped, give artificial respiration by mechanical device or mouth to mouth.
Ingestion	If accidentally swallowed DO NOT INDUCE VOMITING. Keep at rest and Seek medical attention immediately.

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Use water fog, alcohol resistant foam, dry Chemical or Carbon dioxide extinguishers DO NOT USE WATER JET
Stability	Avoid extreme temperatures, and high energy ignition sources.
Decomposition Products	Aldehydes, Sulphur Oxides, Smoke, Fume, Oxides of Carbon, incomplete combustion products

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	Avoid all personal contact. Use proper bonding or earthing procedure. Do not use as a cleaning solvent. Do not use electrical equipment whilst using fuel (mobile phones etc) Prevent small and large spills. Do not siphon my mouth.
Storage	Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, Well-ventilated area. Containers should be earthed, bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters. Store away from sources of ignition.

DISPOSAL MEASURES

Hazard	Measures
Pollution of water courses or drains	Do not allow to enter water courses. Licensed carriers must collect part used containers and empty containers for disposal, re-cycling. DO NOT CUT, BURN, WELD, SOLDER, GRIND, DRILL OR EXPOSE CONATINERS TO SOURCES OF HEAT.

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Spillage	Contain using spill kit or inert material i.e. Dry earth or Sand

MANUFACTURERS INFORMATION	
Manufacturers Name and Address	Esso Petroleum Company Ltd ExxonMobil House Ermyrn Way Leatherhead Surrey KT22 8UX
Manufacturers Health & Safety Data Sheet Reference	708110-60
24 Hour Emergency Telephone Number	01372 222 000
Regulatory Information: Warning Label Phrases	See below

Reference:

Material is dangerous as defined by the EU Dangerous Substances/Preparations Directives.

CLASSIFICATION: Category 3 Carcinogen. Harmful. Dangerous for the environment.

Nature of Special Risk: R40; Limited evidence of a carcinogenic effect. R65; Harmful: may cause lung damage if swallowed. R66; Repeated exposure may cause skin dryness or cracking. R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Advice: S2; Keep out of the reach of children. S36/37; Wear suitable protective clothing and gloves. S61; Avoid release to the environment. Refer to special instructions/safety data sheets. S62; If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Product Name: ESSO DIESEL
Revision Date: 18Dec2007
Page 1 of 10

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

PRODUCT

Product Name: ESSO DIESEL
Product Description: Hydrocarbons and Additives
Product Code: 708110-60
Intended Use: Diesel engine fuel

COMPANY IDENTIFICATION

Supplier: Esso Petroleum Company, Limited
ExxonMobil House
Ermyrn Way
KT22 8UX Leatherhead, Surrey
United Kingdom

**24 Hour Environmental / Health Emergency
Telephone
e-mail**

01372 222 000 (UK) / +44 1372 222 000 (Ireland)
SDS-UK@EXXONMOBIL.COM

SECTION 2 HAZARDS IDENTIFICATION

This material is dangerous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION: | Carc. Cat. 3; R40 | Xn; R65 | R66 | N; R51/53 |

PHYSICAL / CHEMICAL HAZARDS

Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited. Material can accumulate static charges which may cause an incendiary electrical discharge.

HEALTH HAZARDS

Limited evidence of a carcinogenic effect. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. Under conditions of poor personal hygiene and prolonged repeated contact, some polycyclic aromatic compounds (PACs) have been suspected as a cause of skin cancer in humans. May be irritating to the eyes, nose, throat, and lungs. May cause central nervous system depression. High-pressure injection under skin may cause serious damage.

ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Note: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is regulated as a preparation.

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 2 of 10

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	EINECS / ELINCS	Concentration *	Symbols/Risk Phrases
Fuels, diesel, no. 2	68476-34-6	270-676-1	> 94%	Xn;Carc. Cat. 3;R40, Xn;R65, R66, N;R51/53

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Note: Composition may contain up to 0.5% performance additives and / or dyes. FAME (fatty acid methyl ester) may be present up to 5% - the maximum permitted by European Standard EN 590

SECTION 4 FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE

Hydrocarbon Solvents/Petroleum Hydrocarbons- Skin contact may aggravate an existing dermatitis.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 3 of 10

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Aldehydes, Sulphur Oxides, Smoke, Fume, Incomplete combustion products, Oxides of carbon

FLAMMABILITY PROPERTIES

Flash Point [Method]: >56C (133F) [ASTM D-93]

Flammable Limits (Approximate volume % in air): LEL: 0.6 UEL: 7.0

Autoignition Temperature: >250°C (482°F)

SECTION 6

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for Personal Protective Equipment.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. If the Flash Point exceeds the Ambient Temperature by 10 deg C or more, use containment booms and remove from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7

HANDLING AND STORAGE

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 4 of 10

HANDLING

Avoid all personal contact. Use proper bonding and/or earthing procedures. Do not use as a cleaning solvent or other non-motor fuel uses. For use as a motor fuel only. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices etc) in or around any fuelling operation or storage area unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. Prevent small spills and leakage to avoid slip hazard. Do not siphon by mouth. Material can accumulate static charges which may cause an electrical spark (ignition source).

Static Accumulator: This material is a static accumulator.

STORAGE

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Drums must be earthed and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit/Standard			Note	Source	Year
Fuels, diesel, no. 2	Stable Aerosol.	TWA	5 mg/m3			ExxonMobil	2007
Fuels, diesel, no. 2	Vapour.	TWA	200 mg/m3			ExxonMobil	2007

Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s):

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Use explosion-proof ventilation equipment to stay below exposure limits.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode.

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 5 of 10

Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly affect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves. CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.

Eye Protection: If contact with material is likely, chemical goggles are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid

Colour: Light Colored

Odour: Petroleum/solvent

Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 C): 0.85

Flash Point [Method]: >56C (133F) [ASTM D-93]

Flammable Limits (Approximate volume % in air): LEL: 0.6 UEL: 7.0

Autoignition Temperature: >250°C (482°F)

Boiling Point / Range: > 180C (356F)

Vapour Density (Air = 1): > 2 at 101 kPa

Vapour Pressure: < 0.04 kPa (0.3 mm Hg) at 20°C

Evaporation Rate (N-Butyl Acetate = 1): N/D

pH: N/D

Log Pow (n-Octanol/Water Partition Coefficient): > 3.5

Solubility in Water: Negligible

Viscosity: 2 cSt (2 mm²/sec) at 40°C - 4 cSt (4 mm²/sec) at 40°C

Oxidising properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: N/D

Product Name: ESSO DIESEL
Revision Date: 18Dec2007
Page 6 of 10

Melting Point: N/A

SECTION 10	STABILITY AND REACTIVITY
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STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Open flames and high energy ignition sources.

MATERIALS TO AVOID: Halogens, Strong Acids, Strong Bases, Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11	TOXICOLOGICAL INFORMATION
------------	---------------------------

Acute Toxicity

Route of Exposure	Conclusion / Remarks
INHALATION	
Toxicity: LC50 > 5000 mg/m3	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	Elevated temperatures or mechanical action may form vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on test data for structurally similar materials.
INGESTION	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Skin	
Toxicity: LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: Data available.	May dry the skin leading to discomfort and dermatitis. Based on test data for structurally similar materials.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.

CHRONIC/OTHER EFFECTS

For the product itself:

Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Diesel fuel: Carcinogenic in animal tests. Caused mutations in-vitro. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and litter weight, and increased fetal resorptions at maternally toxic doses. Dermal exposure to high concentrations resulted in severe skin irritation with weight loss and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function. Diesel exhaust fumes: Carcinogenic in animal tests. Inhalation exposures to exhaust for 2 years in test animals resulted in lung tumours and lymphoma. Extract of particulate produced skin tumours in test animals. Caused mutations in-vitro.

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 7 of 10

Additional information is available by request.

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

High molecular wt. component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be inherently biodegradable

Atmospheric Oxidation:

More volatile component -- Expected to degrade rapidly in air

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

European Waste Code: 13 07 01

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 8 of 10

for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14

TRANSPORT INFORMATION

LAND (ADR/RID)

Proper Shipping Name: GAS OIL

Proper Shipping Name Suffix: Special Provision 640L

Hazard Class: 3

Classification Code: F1

UN Number: 1202

Packing Group: III

Label(s) / Mark(s): 3

Hazard ID Number: 30

CEFIC Tremcard: 30S1202

Hazchem EAC: 3Y

Transport Document Name: UN1202, GAS OIL, 3, PG III

INLAND WATERWAYS (ADNR)

Proper Shipping Name: GAS OIL

Hazard Class: 3

Hazard ID Number: 30

UN or ID Number: 1202

Packing Group: III

Label(s) / Mark(s): 3

Transport Document Name: UN1202, GAS OIL, 3, PG III

SEA (IMDG)

Proper Shipping Name: GAS OIL

Hazard Class & Division: 3

UN Number: 1202

Packing Group: III

Label(s): 3

EMS Number: F-E, S-E

Transport Document Name: UN1202, GAS OIL, 3, PG III, (56°C c.c.)

AIR (IATA)

Proper Shipping Name: GAS OIL

Hazard Class & Division: 3

UN Number: 1202

Packing Group: III

Label(s): 3

Transport Document Name: UN1202, GAS OIL, 3, PG III

SECTION 15

REGULATORY INFORMATION

Material is dangerous as defined by the EU Dangerous Substances/Preparations Directives.

CLASSIFICATION: Category 3 Carcinogen. Harmful. Dangerous for the environment.

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 9 of 10

EU LABELING:

Symbol: Xn, N



Harmful.



Dangerous for the environment.

Nature of Special Risk: R40; Limited evidence of a carcinogenic effect. R65; Harmful: may cause lung damage if swallowed. R66; Repeated exposure may cause skin dryness or cracking. R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Advice: S2; Keep out of the reach of children. S36/37; Wear suitable protective clothing and gloves. S61; Avoid release to the environment. Refer to special instructions/safety data sheets. S62; If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains: Fuels, diesel, no. 2

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Complies with the following national/regional chemical inventory requirements: EINECS, TSCA, ENCS

Applicable EU Directives and Regulations:

EU Directive:

92/85/EEC [...pregnant workers...recently given birth or...breastfeeding directive]

94/33/EC [...on the protection of young people at work]

SECTION 16

OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):

R40; Limited evidence of a carcinogenic effect.

R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65; Harmful: may cause lung damage if swallowed.

R66; Repeated exposure may cause skin dryness or cracking.

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

No revision information is available.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to

Product Name: ESSO DIESEL

Revision Date: 18Dec2007

Page 10 of 10

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Internal Use Only

MHC: 1A, 0, 0, 0, 1, 1

PPEC: C

DGN: 7081439XGB (1012120)

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

PRODUCT NAME

**JET ACTION DIESEL
10W/40**

Sheet 1 of 6

Revision No : 3

Last Revision Date : December 2005

This is an uncontrolled copy

NAME AND ADDRESS OF MANUFACTURER/SUPPLIER

ConocoPhillips Ltd, Humber Refinery, South Killingholme, North Lincolnshire, DN40 3DW.
Telephone No. 01469 571571
Facsimile No. 01469 555143

EMERGENCY CONTACT

ConocoPhillips Ltd. Humber Refinery, South Killingholme, Immingham, North Lincolnshire DN40 3DW.
Health and Safety Emergency Telephone No. 01469 555348 (24 hours)

APPLICATION

Engine Lubrication

2. COMPOSITION / INFORMATION ON INGREDIENTS

Composition: Highly refined mineral oil, synthetic lubricants and additives.

Hazardous Ingredient(s): Symbol Risk Phrases Other Information %

This product contains ingredients classified as hazardous. However, they are NOT present in sufficient quantities to warrant classifying the product as hazardous.

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of Notified Chemical Substances) or are exempt.

3. HAZARDS IDENTIFICATION

This product is NOT classified as hazardous.

PRODUCT NAME

JET ACTION DIESEL 10W/40

Sheet 2 of 6

Revision No : 3

Last Revision Date : December 2005

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4. FIRST AID MEASURES

- Eyes :** Irrigate immediately with copious quantities of water for several minutes.
- Skin :** Wash thoroughly with soap and water or suitable skin cleanser as soon as possible.
- Inhalation :** Remove from exposure.
- Ingestion :** Obtain medical attention. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

- Suitable Extinguishing Media:** Carbon dioxide, powder, foam or water fog – Do not use water jets.
- Special Exposure Hazards:** None
- Special Protective Equipment:** None

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions :** Spilt product presents a significant slip hazard.
- Environmental Precautions :** Prevent entry into drains, sewers and water courses.
- Decontamination Procedures:** Soak up with inert absorbant or contain and remove by best available means.

7. HANDLING AND STORAGE

- Handling:** To avoid the possibility of skin disorders, repeated or prolonged contact with products of this type must be avoided. It is essential to maintain a high standard of personal hygiene.
- Storage:** No special precautions.

PRODUCT NAME

JET ACTION DIESEL 10W/40

Sheet 3 of 6

Revision No : 3

Last Revision Date : December 2005

This is an uncontrolled copy**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Occupational Exposure Limits:-

Substance	8 Hr. TWA	STEL	Source/Other Information
Mineral oil (see Oil mist, mineral)*	5mg/m ³	10mg/m ³	HSE Guidance: <i>not</i> included in EH40
* this limit is NOT applicable to used engine oils or metalworking fluids			

Engineering Control Measures: None

Personal Protective Equipment: Avoid skin and eye contact. Wear impervious gloves (e.g. of PVC, to EN 374), in case of repeated or prolonged contact.
Change contaminated clothing and clean before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	Amber
Odour:	Mild
Boiling Point/Range (°C):	Above 250
Pour Point: (°C):	Minus 39
Kinematic Viscosity @ 40°C (cSt):	90
Kinematic Viscosity @ 100°C (cSt):	13
Flash Point (closed, °C):	205
Autoignition (°C):	Above 250
Explosive Properties (%):	Not determined
Vapour Pressure (kPa at 20°C):	Below 0.1
Relative Density (at 20°C):	0.86
Water Solubility:	Insoluble
Fat Solubility:	Not determined

10. STABILITY AND REACTIVITY

Stability :	Stable, will not polymerize.
Conditions to avoid :	Temperatures (°C) above 120.
Materials to avoid :	Strong oxidizing agents.
Hazardous Decomposition Products :	Irritant fumes.

PRODUCT NAME

JET ACTION DIESEL 10W/40

Sheet 4 of 6

Revision No : 3

Last Revision Date : December 2005

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11. TOXICOLOGICAL INFORMATION

The following toxicological assessment is based on knowledge of the toxicity of the product's components.
Expected oral LD 50, rat > 2g/kg.

HEALTH EFFECTS

On eyes : May cause transient irritation.

On skin : Unlikely to cause harm on brief or occasional contact.

By inhalation : Low volatility makes inhalation unlikely at ambient temperatures.

By ingestion : May cause nausea, vomiting and diarrhoea.

Chronic : Repeated and prolonged skin contact may lead to skin disorders.

Other: None known.

12. ECOLOGICAL INFORMATION

Environmental Assessment:

When used and disposed of as intended, no long-term hazards to the environment are foreseen.

Mobility:

Non-volatile. Mobile liquid. Insoluble in water.

Persistence and Degradability:

Inherently biodegradable.

Bioaccumulative Potential:

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Ecotoxicity:

Not determined.

PRODUCT NAME

JET ACTION DIESEL 10W/40

Sheet 5 of 6

Revision No : 3

Last Revision Date : December 2005

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13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.

Unused Product:	May be sent for reclamation.
Used/Contaminated Product:	Dispose of through an authorised waste contractor to a licensed site. Classified as special waste. May be incinerated.
Packaging:	Must be disposed of through an authorised waste contractor. May be steam cleaned and recycled.

14. TRANSPORT INFORMATION

This product is NOT classified as dangerous for transport.

15. REGULATORY INFORMATION

This product is NOT classified as dangerous for supply in the UK>

Hazard Label Data :

EC Directives:	Waste Oil Directive, 87/101/EEC Hazardous Waste Directive, 91/689/EEC
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Statutory Instruments :	The Health and Safety at Work Act 1974 Consumer Protection Act 1987 Environmental Protection Act 1990 Special Waste Reg. 1996 (SI 972)
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Codes of Practice:	Waste Management. The Duty of Care
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Guidance Notes:	Workplace exposure limits (EH 40) Carcinogenicity of mineral oils (EH 58) Skin Cancer caused by oil [MS(B)5]. Save your skin! – Occupational Contact Dermatitis {MS(B)6} Dermatitis – cautionary notice [SHW 367] Effects of mineral oil on the skin [SHW 397]
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The above publications are available from HMSO or HSE Books.

PRODUCT NAME

JET ACTION DIESEL 10W/40

Sheet 6 of 6

Revision No : 3

Last Revision Date : December 2005

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16. OTHER INFORMATION

The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this Sheet. You should not use the product other than for the stated application or applications.

If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others or may be affected of any hazards described in this sheet and of any precautions, which should be taken.

Further copies of this Safety Data Sheet may be obtained from ConocoPhillips Ltd.

This data sheet was revised in sections 1, 8 & 15

KEY HAZARDS & CONTROLS IDENTIFIED

- Harmful to aquatic organisms, may cause long term adverse effects on the environment
- May cause lung damage if swallowed.
- Clean spillages immediately with spill kits or inert material such as sand or dry earth. Dispose of via licensed carrier in a sealed container.
- Avoid unnecessary skin contact and eye contact
- Store away from sources of heat/ignition in tanks compliant with oil storage regulations.
- Do not stand down wind whilst spraying.
- Do not discharge into drains or rivers.
- Wear Impervious gloves and long trousers and upper body clothing.

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Possible light irritation at site of contact. Wash the area thoroughly with soap and water before continuing. Remove heavily contaminated clothing and laundry. Wash underlying skin.
Eye Contact	Remove contact lenses, irrigate copiously with fresh clean water for 10-15 minutes holding eyelids apart seek medical advice
Inhalation	Remove from further exposure to fresh air. If Nose or airways become inflamed or irritated, seek medical advice.
Ingestion	If accidentally swallowed DO NOT INDUCE VOMITING. Wash out mouth with plenty of water and give patient plenty to drink. Seek medical attention immediately if large amounts have been consumed which should be highly unlikely.

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Dry Chemical powder, Alcohol resistant Foam, CO2 and water fog extinguishers . DO NOT USE WATER JET
Stability	Emits toxic fumes in combustion
Decomposition Products	Fumes, dense smoke.

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	Avoid skin and eye contact. If splashing is likely, wear safety goggles. Remove heavily contaminated clothing and lauder before wearing. Spray upwind.
Storage	Store undercover, away from heat sources of ignition.

DISPOSAL MEASURES

Hazard	Measures
Harmful	To be disposed of via licensed carrier.

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Prevent from entering Drains, Sewers or Water courses.	Clear up by spill kits or inert materials.

MANUFACTURERS INFORMATION	
Manufacturers Name and Address	TBA
Manufacturers Health & Safety Data Sheet Reference	TBA
24 Hour Emergency Telephone Number	TBA
Regulatory Information: Warning Label Phrases	See below

Reference:

CLASSIFICATION: HARMFUL

R52/53 Harmful to aquatic organisms, may cause long term effects in the aquatic environment.

R65 may cause lung damage if swallowed.

S61 Avoid release to the environment. Refer to special Instructions / safety data sheets.

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

NOTE: The regulatory information given above only indicates the principal specifically applicable to the product described in the data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions. And the product specific data sheet.

Risk Phrases used in S2.

R10 Flammable

R37 Irritating to respiratory system.

R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R65 Harmful may cause lung damage if swallowed.

R38 Irritating to skin.

ADOMAST

SAFETY DATA SHEET

ADOSTRIKE

1.0 IDENTIFICATION OF COMPOUND

ADOSTRIKE Concrete mould oil

1.10 IDENTIFICATION OF MANUFACTURER

Adomast Building Chemicals Ltd.
Unit G, Lea Road Trading Estate, Waltham Abbey, Essex EN9 1AE
Telephone: 01992 710 684 Fax: 01992 712 813

2.00 COMPOSITION/INFORMATION ON INGREDIENTS

A mixture of hydrocarbon middle distillate, high boiling hydrocarbon oil and fatty acids.

3.00 HAZARDS IDENTIFICATION

If swallowed could cause vomiting, harmful or fatal if aspirated into the lungs.
May remove the natural greases from the skin which may result in dryness, cracking and dermatitis.
Inhalation may cause irritation to respiratory tract.
May cause minor irritation to eyes.

4.00 FIRST AID MEASURES

Eyes: Flush eyes with copious amounts of water. Seek medical advice if any irritation persists.
Skin: Remove contaminated clothing. Wash skin with soap and water.
Inhalation: If inhalation of high concentrations of vapour or mist should occur, remove victim from exposure.
Ingestion: Do not induce vomiting. Place patient in recovery position and seek medical help.

5.00 FIRE FIGHTING MEASURES

Extinguishing Media: Dry powder, foam, water fog or (for small fires) carbon dioxide.
Unsuitable Extinguishing Media: Water jets.

6.00 ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Do not allow product to enter drains or water courses. Advise local authorities if this is not possible.
Clean Up Methods: Recover all spillages using absorbent materials.

7.00 HANDLING AND STORAGE

Handling: Avoid contact with eyes/skin. Do not breath vapour/spray. Provide adequate ventilation, including local extraction if necessary.
Storage: Product is a neutral mineral oil and may be stored in steel drums.

8.00 EXPOSURE CONTROLS / PERSONAL PROTECTION

Oil Mist, Mineral

Long term exposure limit (LTCL): 5mg/m³ 8hr TWA
Short Term Exposure Limit (STEL): 10mg/m³ 15 min STEL
Good working practice suggests that impervious gloves and goggles should be worn when handling this product.

9.00 PHYSICAL AND CHEMICAL PROPERTIES

Form : Clear liquid **Colour :** Straw brown **Odour :** Faint
Flash Point (°C) : 85 **Flammability Limits :** N/A
Relative density : 0.86 – 0.87 **Boiling Point (°C) :** N/A
Solubility: water : insoluble **organics:** miscible with many

10.00 STABILITY AND REACTIVITY

Stable at normal temperatures and pressures. Not reactive at normal temperature and pressure conditions.

11.00 TOXICOLOGICAL INFORMATION

Inhalation: Not available
Skin contact: Not available
Ingestion: Not available

12.00 ECOLOGICAL INFORMATION

Not available

13.00 DISPOSAL CONSIDERATIONS

Disposal of product and contaminated containers by landfill or incineration in accordance with local, state or national regulations.

14.00 TRANSPORT INFORMATION

UN No: None **Proper Shipping Name:**
Class/Packing Group: None **HAZCHEM Code:** 3[Z]
ADR/RID Item No: None **ADR/RID Hazard ID No:** None

15.00 REGULATORY INFORMATION

Classification: Harmful **Hazard symbol:** Xn
Risk Phrases:
R65 Harmful : May cause lung damage if swallowed
Safety Phrases:
S24/25 Avoid contact with the skin and eyes.
S37 Wear suitable gloves
S28 After contact with skin wash with plenty of water
S29 Do not empty into drains
S43 In case of fire use sand, earth, foam or water fog.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this information.

16.00 OTHER INFORMATION

Every effort has been made to ensure that the information contained in this safety data sheet is reliable but we cannot accept any liability for any loss, injury or damage which may result from use of the product. This information does not constitute assessment of risk as required by health and safety legislation. Data given in this safety data sheet are solely for guidance in safe handling and use of the product by customers; they do not form part of any specification.

ABCD 484 ISSUE: 1
ISSUED: SEP 2000

Lea Road Trading Estate, Lea Road, Waltham Abbey, Essex. EN9 1AE
Tel. 01992 710684 Fax. 01992 712813 Email. sales@adomast.co.uk

C.O.S.H.H. Assessment

Material :

Project :

Hazard data sheet : *see attached or maintained in office*

Date : 5 ggYggcf

Hazards

Inhalation	NO	Skin contact	YES	Ingestion	YES
Toxic	NO	Irritant	YES	Corrosive	NO
Harmful	NO	Other	<i>Environmental pollutant</i>		

Protective clothing

Gloves (to BS EN374 -3)	YES - waterproof	Mask / Respirator (to BS EN149)	No	Wellingtons
Goggles (to BS EN166)	NO	Other :		

Application, Use & Duration of Exposure.

Avoid all eye and skin contact
Wash hands before eating or smoking
Wherever possible controlled application is required via hand spray or brush
Always wear P.P.E. provided

Precautions

First Aid:	<i>See below</i>	Fire:	<i>No flammable</i>
Storage:	<i>do not freeze</i>	Spillage:	<i>Absorb with inert material</i>
Waste:	<i>Authourised waste via licensed carrier</i>	Other:	

Comments

EYES - Wash out with water immediately for 10min, seek medical help
SKIN - Wash off with soap and water
INGESTION - Do not induce vomiting, drink 1/2 pint water, seek medical help
INHALATION - Remove to fresh air

ADOMAST

SAFETY DATA SHEET

ADOTARD MF

1.00 IDENTIFICATION OF COMPOUND

ADOTARD MF: Concrete surface retarders

1.10 IDENTIFICATION OF MANUFACTURER

Adomast Building Chemicals Ltd.

Unit G, Lea Road Trading Estate, Waltham Abbey, Essex EN9 1AE

Telephone: 01992 710 684 Fax: 01992 712 813

2.00 COMPOSITION / INFORMATION ON

INGREDIENTS

Chemical name	CAS No	Concentration(%w/w)
White spirit	64742-88-7	< 30%

Hazard Symbol Xn

Risk Phrases 10: Flammable
65: Harmful: May cause lung damage if swallowed

Chemical name	CAS No	Concentration(%w/w)
1,2,4-trimethylbenzene	95-63-6	< 12.5%

Hazard Symbol Xn

Risk Phrases 20: Harmful by inhalation.
36/37/38: Irritating to eyes, respiratory system and skin.

Chemical name	CAS No	Concentration(%w/w)
Solvent naphtha (petroleum)	64742-95-6	< 20%

Hazard Symbol Xn

Risk Phrases 10: Flammable
65: Harmful: may cause lung damage if swallowed

3.00 HAZARDS IDENTIFICATION

Flammable. If swallowed will cause vomiting and diarrhoea. Minute amounts aspirated into the lungs during ingestion or subsequent vomiting may cause severe pulmonary injury. High concentrations of vapour may be harmful by inhalation. Will remove the natural greases from the skin which may result in dryness, cracking and dermatitis. May be irritant to the eyes, respiratory system and skin. May be toxic to aquatic organisms. May cause long term damage to the aquatic environment.

4.00 FIRST AID MEASURES

Eyes: Flush eyes with copious amounts of water. Seek medical advice if any irritation persists. **Skin:** Remove contaminated clothing. Wash skin with soap and water. Seek medical advice if any irritation persists. **Inhalation:** If inhalation of high concentrations of vapour or mist should occur, remove victim from exposure. Obtain medical attention. **Ingestion:** Do not induce vomiting. Wash out mouth with water, give 200-300 ml of water to drink and seek medical attention.

5.00 FIRE FIGHTING MEASURES

This product is combustible.

Extinguishing Media: Dry powder, foam or carbon dioxide.

Unsuitable Extinguishing Media: Water jets. **Special Hazards:** Drums and other containers of product exposed to fire may explode. These may be cooled with water spray/fog equipment. **Special protective equipment:** Wear suitable clothing to prevent eye/skin contact occurring. Wear suitable breathing apparatus in high concentrations of vapour or poorly ventilated areas.

6.00 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Eliminate ignition sources. Wear full protective clothing and goggles. The use of breathing apparatus in confined spaces is recommended.

Environmental Precautions: Do not allow product to enter drains or water courses. Advise local authorities if this is not possible.

Clean Up Methods: Recover all spillages using absorbent materials.

7.00 HANDLING AND STORAGE

Handling: Avoid contact with eyes/skin. Do not breathe vapour/spray. Provide adequate ventilation, including local extraction if necessary. Use appropriate breathing apparatus if this is not possible. **Storage:** Protect containers from heat and sources of ignition. Keep containers away from strong oxidising agents. Take precautionary measures against static discharges.

8.00 EXPOSURE CONTROLS / PERSONAL PROTECTION

White spirit

Long term exposure limit (LTEL): 575mg/m³ 8hr TWA

Short term exposure limit (STEL): 720mg/m³ 10 min STEL

1,2,4-Trimethylbenzene

Long term exposure limit (LTEL): 125mg/m³ 8hr TWA

Solvent naphtha (Petroleum), light aromatic

Long term exposure limit (LTEL): 200mg/m³ 8hr TWA

Good working practice suggests that full protective clothing with impervious gloves and goggles should be worn when handling this product. Wear suitable breathing apparatus in confined or poorly ventilated spaces. No eating, drinking or smoking while using this product.

9.00 PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous liquid

Colour: Opaque white/cream

Odour: Sweet hydrocarbon

Flash Point (°C): 38 min

Flammability Limits: Lower 0.6 % Upper 8.0 %

Solubility: water: sparingly soluble

10.00 STABILITY AND REACTIVITY

Conditions to avoid: Heat and sources of ignition

Materials to avoid: Oxidising agents and strong mineral acids.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, smoke and hydrocarbons may be produced upon thermal decomposition of the product.

11.00 TOXICOLOGICAL INFORMATION

Inhalation: High concentrations of vapour may be irritant to the upper respiratory tract. When inhaled at high concentrations it may cause respiratory irritation, nausea, vomiting and CNS depression. **Skin contact:** Skin contact may result in moderate irritation. Will remove the natural greases resulting in dryness, cracking and dermatitis on prolonged or repeated exposure. **Eye Contact:** Irritating but does not cause tissue damage. **Ingestion:** Minute amounts aspirated into the lungs during ingestion or subsequent vomiting may cause bronchopneumonia or pulmonary oedema. Large quantities may produce nausea, vomiting and diarrhoea.

12.00 ECOLOGICAL INFORMATION

Mobility: The product has moderate mobility in water and is expected to have low mobility in soil. **Degradability:** The product is expected to be at least 90% biodegradable. **Accumulation:** White spirit is expected to bioaccumulate but with slow retention of the order of one week. **Ecotoxicity:** Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Spillages may be harmful to wildlife, particularly birds. Advise appropriate authorities of spillage into surface water or water courses.

13.00 DISPOSAL CONSIDERATIONS

Disposal of product and contaminated containers by landfill or incineration in accordance with local, state or national regulations.

14.00 TRANSPORT INFORMATION

UN No: 1300 Proper Shipping Name: Turpentine substitute mixture

Class/Packing Group: 3/III HAZCHEM Code: 3[Y]

ADR/RID Item No: 31(°C) ADR/RID Hazard ID No: 30

15.00 REGULATORY INFORMATION

Classification: Harmful Hazard symbol: Xn

Risk Phrases:

R10: Flammable. R65 Harmful: May cause lung damage if swallowed

Safety Phrases:

S23 Do not breathe vapour.

S24 Avoid contact with the skin.

S33 Take precautionary measures against static discharges.

S43 In case of fire use water spray, foam, dry powder or CO₂.

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this information.

16.00 OTHER INFORMATION

Every effort has been made to ensure that the information contained in this safety data sheet is reliable but we cannot accept any liability for any loss, injury or damage that may result from use of the product. This information does not constitute assessment of risk as required by health and safety legislation. Data given in this safety data sheet are solely for guidance in safe handling and use of the product by customers; they do not form part of any specification.

ABCD 313 ISSUE: 6
ISSUED: JUN 1998

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Euro City Eastern

Coshh Assessments & Arrangements

Page 48 of 84

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Revision 'O'

C.O.S.H.H. Assessment

Material : *CURING AGENT*

Project :

Hazard data sheet : *see attached or maintained in office*

Date : 5 ggYggYX

Hazards

Inhalation	NO	Skin contact	YES	Ingestion	YES
Toxic	NO	Irritant	YES	Corrosive	NO
Harmful	NO	Other			



Protective clothing

Gloves	YES - waterproof	Mask / Respirator	No	Wellingtons
(to BS EN374 -3)		(to BS EN149)		
Goggles	NO	Other :		
(to BS EN166)				

Application, Use & Duration of Exposure.

Avoid all eye and skin contact
Wash hands before eating or smoking
Wherever possible controlled application is required
Always wear P.P.E. provided
Use only in well ventilated areas

Precautions

First Aid:	<i>See below</i>	Fire:	<i>Dry powder or Foam Extinguisher</i>
Storage:	<i>Well ventilated</i>	Spillage:	<i>Absorb with inert material</i>
Waste:		Other:	

Comments

EYES - Wash out with water immediately
SKIN - Wash off with water immediately
INGESTION - Take to hospital immediately

ADOMAST

DATA SHEET

ADOCURE STANDARD RANGE 75 % Efficiency Concrete Curing Compounds

Advantages

- Prevents premature drying out of the concrete surface, thus:
- Reducing the risks of surface cracking and
- Reducing the risk of surface dusting.
- Improves the durability of the concrete surface.
- Will enable the concrete to attain improved physical properties.
- 75 % Curing efficiency.
- Easy to use, spray application.

ADOCURE STANDARD is UKWFBs listed as suitable for use on potable water schemes.

ADOCURE STANDARD physically “locks” moisture into freshly cast concrete surfaces to allow full hydration of the cement thus allowing the concrete to fully “cure”.

It does this by covering the surface of the concrete with a resin film which prevents moisture from leaving the surface.

An aluminised variant of **ADOCURE STANDARD**, **ADOCURE STANDARD AL** is also available which complies with clauses 1027 and 1035 of the DOT Specification for Highway Works. It is also available in a white pigmented form, **ADOCURE STANDARD W** and tinted with a fugitive dye **ADOCURE STANDARD T**.

ADOCURE STANDARD AL is identical in every respect to **ADOCURE STANDARD** other than it contains aluminium flake which when sprayed on the concrete surface produces a metallic “mirror” surface to reflect away solar heat, this is particularly advantageous on large expanses of concrete such as airport runways and concrete roadways, where solar heat combined with the heat of hydration may combine to form cracking.

In accordance with the requirements of Clause 1027 of the Department of Transport’s Specification for Highway Works **ADOCURE STANDARD AL** contains flake aluminium which is designed to float to the surface of the applied curing compound. Prior to decanting or application it is essential that the contents of containers are thoroughly agitated and that the mechanical sprayers used to spray **ADOCURE STANDARD AL** incorporate an efficient mechanical device for continuous agitation and mixing of the compound during spraying.

In situations where a 90 % curing efficiency is required **ADOCURE SUPER** or **ADOCURE SUPER AL**, **SUPER W** and **SUPER T** are available.

ADOCURE STANDARD and its variants are not recommended for use in situations where subsequent bonding of any renders screeds or coatings is required, in these situations either remove all traces of the curing compound used by physical abrasion prior to carrying out the work or use **ADOCURE WW** or **ADOCURE WWT**, see separate data sheet.

Coverage

Apply the selected grade by spray at a rate of approximately 5.5 m² per litre, taking care to ensure complete coverage. Immediately after use the spraying equipment should be thoroughly washed out with **RESOKLENS**.

Use

Freshly cast surfaces

Apply progressively as soon as final tamping or trowelling has been completed. Avoid delays particularly on warm windy days when water will evaporate quickly from the surface before the curing agent has been applied.

Surfaces struck from shuttering

On surfaces struck from shuttering the concrete is “hungry” for water, flood coat with water as soon as the formwork is struck, as soon as this water has run off, apply the desired grade of **ADOCURE STANDARD**. If this is not done it is probable that the curing compound will be “sucked” below the concrete surface leaving the concrete surface unprotected. This advice regarding the flood coating of concrete surfaces protected by formwork is applicable whatever curing agent you may be using. Curing agents are designed to lock moisture into concrete, they can only achieve this by being on the surface of the concrete.

Curing agents do not provide thermal protection. It may be advisable to provide independent thermal protection in cold weather.

Packaging

Available in 25 litre and 205 litre containers.

Health and Safety

During application avoid contact with eyes and skin. In the event of eye contact irrigate immediately with copious quantities of water and then seek medical advice. In the event of skin contact wash with soap and water or a resin removing cream.

Reference should be made to our separate detailed health and safety sheet.

ABCD 424 ISSUE: 3
ISSUED: MAR 1997

Lea Road Trading Estate, Lea Road, Waltham Abbey, Essex. EN9 1AE
Tel. 01992 710684 Fax. 01992 712813 Email. sales@adomast.co.uk

KEY HAZARDS & CONTROLS IDENTIFIED

- Is very irritating and corrosive to the respiratory system
- Use only in well ventilated areas
- Avoid contact with skin, eyes and clothing
- This product is very corrosive to the skin and eyes, resulting in severe burns
- Wash after handling, especially before eating, drinking or smoking.

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a doctor.
Eye Contact	Get medical attention immediately. Immediately flush out eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a doctor.
Inhalation	Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
Ingestion	Get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a doctor. Maintain an open airway.

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Not combustible. Use water spray, foam, dry chemical or carbon dioxide.
Stability	Stable under normal conditions.
Decomposition Products	Decomposition products may include metal oxide/oxides.

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	Use appropriate PPE, eating, smoking, drinking are prohibited in areas where the product is being used. Wash hands before eating, drinking, smoking or using the toilet. Do not get on clothing, in eyes or on skin. Do not breathe vapour or mist, use only with adequate ventilation or respiratory apparatus. Keep in the original container or an approved alternative made from compatible material. Keep away from acids.
Storage	Store in accordance with local regulations, store in original container protected from direct sunlight in a dry, cool and well ventilated area. Keep container tightly closed, keep away from acids. Do not store in an unlabelled container, containers that have been opened must be stored upright and carefully resealed.

DISPOSAL MEASURES

Hazard	Measures
Corrosive	Hazardous waste. Disposal of bulk quantities and/or containers should be made through a licenced hazardous waste carrier.

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Prevent from entering Drains, Sewers or Water courses.	Try to prevent the material from entering drains or water courses. Remove spilled/leaked product by scraping from surfaces. Allow to solidify normally.

MANUFACTURERS INFORMATION

Manufacturers Name and Address	Sika Limited Watchmead Welwyn Garden City Hertfordshire. AL7 1BQ
Manufacturers Health & Safety Data Sheet Reference	
24 Hour Emergency Telephone Number	01707 394444
Regulatory Information: Warning Label Phrases	See below

15. REGULATORY INFORMATION**EU regulations**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols : C

Corrosive

Contains

: Sodium aluminate
potassium hydroxide

Risk phrases

: R35- Causes severe burns.
R37- Irritating to respiratory system.

Safety phrases

: S2- Keep out of the reach of children.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

VOC content (EU)

: VOC (w/w): 0%

NAME OF HAZARDOUS SUBSTANCE USED OR CREATED (describe use or application)

All Purpose silicone mastic







COSHH Number 1003

page 1

Assessment By	Activity	GJH	Assessment Date
	Silicone sealant		
	Persons/Groups at Risk		
	Carpenters, painters, glaziers etc		

HOW IS IT HAZARDOUS

CLASSIFIED AS Non harmful	Symbol:	R values:	S values: S36 / 37 /39
-------------------------------------	----------------	------------------	----------------------------------

					
FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES	YES	YES	YES	YES	YES
NO	NO	NO	NO	NO	NO
	X	X	X	X	X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in
appropriate boxes

		YES	NO
Is Manufacturers Safety Data Sheet attached?	Attach Sheet if YES	X	
Are Specific Safety Precautions required in the use of the Substance?	Provide details if YES		X
Will employees be given specific training? ie TBT or specialist training	Attach details if YES		X
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards		
RPE / Masks	BS EN149		X
Goggles or Spectacles	BS EN 166b 166f		X
Gloves, Rubber chemical proof	BS EN420	X	
Boots / Footwear	BS EN345		X
Overalls			X
Other Equipment	Attach details if YES		
Will Exposure Monitoring and /or Health Surveillance ?	Attach details if YES		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?			X
Have all necessary First-aid requirements been provided?		X	
Have Storage requirements for the substance been provided/arranged on site?		X	
FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4		Number of Sheets attached to this Assessment	

KEY HAZARDS & CONTROLS IDENTIFIED

- Avoid contact with skin and clothing.
- Always keep container sealed when not in use.
- Always have a spill kit available absorb with inert material ie sand

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Remove contaminated clothing, wash skin with soap and water
Eye Contact	Irrigate copiously with fresh clean water for 15 minutes holding eyelids apart seek medical advice
Inhalation	Remove to fresh air
Ingestion	Wash out mouth with water, DO NOT INDUCE VOMITING Seek Urgent medical help

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	This product is not flammable
Stability	n/a
Decomposition Products	n/a

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	Must be kept in original packaging, follow usage instructions
Storage	Observe the label precautions. Store in a cool dry place away from sources of ignition

DISPOSAL MEASURES

Hazard	Measures
Pollution of water courses or drains	Do not allow to enter water courses

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Spillage	Contain using spill kit or inert material, sand or similar

MANUFACTURERS INFORMATION

Manufacturers Name and Address	See attached information
Manufacturers Health & Safety Data Sheet Reference	See attached information
24 Hour Emergency Telephone Number	See attached information
Regulatory Information: Warning Label Phrases	See below



SAFETY DATA SHEET

ALL PURPOSE SILICONE SEALANT WHITE WICKES

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME ALL PURPOSE SILICONE SEALANT WHITE WICKES
 PRODUCT NO. 710566, 710870
 INTERNAL ID SKU 240702, 243801
 SUPPLIER BOSTIK LIMITED
 COMMON ROAD
 STAFFORD
 STAFFORDSHIRE
 ST16 3EH
 +44 1785 255141
 +44 1785 272650 (24Hour
 Emergency)
 sds.uk@bostik.com

2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
DISTILLATES,PETROLEUM,HYDROTREATED MIDDLE.	265-148-2	64742-46-7	10-30%	Xn;R65.
TRIACETOXYETHYLSILANE	241-677-4	17689-77-9	1-5%	C;R34. R14.

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

General first aid, rest, warmth and fresh air.

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination. Rinse the skin immediately with lots of water. Get medical attention if irritation persists after washing.

EYE CONTACT

Rinse the eye with water immediately. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

SPECIFIC HAZARDS

Fire or high temperatures create: Toxic gases/vapours/fumes of Carbon dioxide (CO₂). Carbon monoxide (CO).

PROTECTIVE MEASURES IN FIRE

Wear self contained breathing apparatus

6 ACCIDENTAL RELEASE MEASURES

ALL PURPOSE SILICONE SEALANT WHITE WICKES

SPILL CLEAN UP METHODS

Stop leak if possible without risk. Do not contaminate water sources or sewer. Pick up with vacuum or absorbent solid, store in closed container for disposal. Avoid generation and spreading of dust. Avoid contact with skin or inhalation of spillage, dust or vapour. Wear necessary protective equipment. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Use mechanical ventilation in case of handling which causes formation of dust.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Use engineering controls to reduce air contamination to permissible exposure level.

ENGINEERING MEASURES

All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT

Wear respirator if there is dust formation.

HAND PROTECTION

Use suitable protective gloves if risk of skin contact. Use thin cotton gloves inside the rubber gloves if allergy risk.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES

Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. DO NOT SMOKE IN WORK AREA!

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Paste		
COLOUR	White		
ODOUR	Pungent		
SOLUBILITY	Practically insoluble in water		
RELATIVE DENSITY	0.99	AUTO IGNITION TEMPERATURE (°C)	400

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERISATION

Unknown.

ALL PURPOSE SILICONE SEALANT WHITE WICKES

MATERIALS TO AVOID

No incompatible groups noted.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

11 TOXICOLOGICAL INFORMATION

HEALTH WARNINGS

Serious long-term effects are not known to be related to this type of product.

May cause discomfort if swallowed.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment. However, contamination of the aquatic or terrestrial environments should be avoided

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

No transport warning sign required.

MARINE POLLUTANT

No.

15 REGULATORY INFORMATION

RISK PHRASES

NC

Not classified.

SAFETY PHRASES

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

P13

Safety data sheet available for professional user on request.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16 OTHER INFORMATION

GENERAL INFORMATION

This product should be used as directed by Bostik Ltd. For further information consult the product data sheet or contact Technical Services.

INFORMATION SOURCES

This safety data sheet was compiled using current safety information supplied by distributor of raw materials.

REVISION COMMENTS

This safety data sheet supersedes all previous issues and users are cautioned to ensure that it is current. Destroy all previous data sheets and if in doubt contact Bostik Limited.

ISSUED BY

Approved EC

REVISION DATE

July 2007

REV. NO./REPL. SDS GENERATED

2

DATE

July 2006

ALL PURPOSE SILICONE SEALANT WHITE WICKES

RISK PHRASES IN FULL

R14	Reacts violently with water.
R34	Causes burns.
R65	Harmful: may cause lung damage if swallowed.



SAFETY DATA SHEET OIL BASED MASTIC TP

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME	OIL BASED MASTIC TP
PRODUCT NO.	642317, 642324
SUPPLIER	BOSTIK LIMITED COMMON ROAD STAFFORD STAFFORDSHIRE ST16 3EH +44 1785 255141 +44 1785 272650

2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION COMMENTS

No hazardous materials present as defined by Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3)

3 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

4 FIRST-AID MEASURES

GENERAL INFORMATION

General first aid, rest, warmth and fresh air.

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination. Rinse the skin immediately with lots of water. Get medical attention if irritation persists after washing.

EYE CONTACT

Rinse the eye with water immediately. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

SPECIFIC HAZARDS

Fire or high temperatures create: Toxic gases/vapours/fumes of Carbon dioxide (CO₂). Carbon monoxide (CO).

PROTECTIVE MEASURES IN FIRE

Wear self contained breathing apparatus

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Stop leak if possible without risk. Do not contaminate water sources or sewer. Pick up with vacuum or absorbent solid, store in closed container for disposal. Avoid generation and spreading of dust. Avoid contact with skin or inhalation of spillage, dust or vapour. Wear necessary protective equipment. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Use mechanical ventilation in case of handling which causes formation of dust.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place. Keep in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

OIL BASED MASTIC TP**INGREDIENT COMMENTS**

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT**PROCESS CONDITIONS**

Use engineering controls to reduce air contamination to permissible exposure level.

ENGINEERING MEASURES

All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT

Wear respirator if there is dust formation.

HAND PROTECTION

Use suitable protective gloves if risk of skin contact. Use thin cotton gloves inside the rubber gloves if allergy risk.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

OTHER PROTECTION

Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES

Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. DO NOT SMOKE IN WORK AREA!

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Paste
COLOUR	Varying

10 STABILITY AND REACTIVITY**STABILITY**

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERISATION

Unknown.

MATERIALS TO AVOID

No incompatible groups noted.

HAZARDOUS DECOMPOSITION PRODUCTSFire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).**11 TOXICOLOGICAL INFORMATION****HEALTH WARNINGS**

Dust may irritate respiratory system. Serious long-term effects are not known to be related to this type of product.

Particles in the eyes may cause irritation and smarting. May cause discomfort if swallowed.

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

Not regarded as dangerous for the environment. However, contamination of the aquatic or terrestrial environments should be avoided

13 DISPOSAL CONSIDERATIONS**GENERAL INFORMATION**

This material is not classified as special waste as defined by Special Waste Regulations 1996.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION**GENERAL**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

No transport warning sign required.

OIL BASED MASTIC TP

ADR LABEL NO.

0

MARINE POLLUTANT

No.

15 REGULATORY INFORMATION

RISK PHRASES

NC

Not classified.

SAFETY PHRASES

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16 OTHER INFORMATION

GENERAL INFORMATION

This product should be used as directed by Bostik Ltd. For further information consult the product data sheet or contact Technical Services.

INFORMATION SOURCES

This safety data sheet was compiled using current safety information supplied by distributor of raw materials.

REVISION COMMENTS

This safety data sheet supersedes all previous issues and users are cautioned to ensure that it is current. Destroy all previous data sheets and if in doubt contact Bostik Limited.

ISSUED BY

Approved EC

REVISION DATE

Sept 2005

REV. NO./REPL. SDS GENERATED 1

DATE

Sept 2005

NAME OF HAZARDOUS SUBSTANCE USED OR CREATED (describe use or application)

PU Expanding flexi foam







COSHH Number 1001

page 1

Assessment By	Activity	GJH	Assessment Date
	Expanding void filler		
	Persons/Groups at Risk		
	Site Operatives – Laborers & Carpenters etc		

HOW IS IT HAZARDOUS

CLASSIFIED AS Harmful	Symbol: Si	R values: R22 R23/24 R34 R36/38	S values:
----------------------------------------	-----------------------------	----------------------------------------------------	------------------

					
FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES	YES	YES	YES	YES	YES
NO	NO	NO	NO	NO	NO
	X	X	X	X	X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in appropriate boxes

		YES	NO
Is Manufacturers Safety Data Sheet attached?	Attach Sheet if YES		X
Are Specific Safety Precautions required in the use of the Substance?	Provide details if YES	X	
Will employees be given specific training? ie TBT or specialist training	Attach details if YES	X	
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards		
RPE / Masks	BS EN149		X
Eye protection - Goggles or Spectacles	BS EN 166b	X	
Gloves - PVC	BS EN420	X	
Boots / Footwear	BS EN345 S5		X
Overalls			X
Other Equipment	Attach details if YES		X
Will Exposure Monitoring and /or Health Surveillance ?	Attach details if YES		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?			X
Have all necessary First-aid requirements been provided?		X	
Have Storage requirements for the substance been provided/arranged on site?		X	

FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4

Number of Sheets attached to this Assessment

KEY HAZARDS & CONTROLS IDENTIFIED

- Avoid all eye and skin contact
- Do not inhale mist or fume
- Wash hands before eating or smoking
- Always wear PPE provided
- Inhalation is only a concern in confined spaces
- Keep away from sources of ignition.

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Wash with Water and soap immediately. Get medical attention promptly if symptoms occur after washing.
Eye Contact	Remove contact lenses, irrigate immediately with fresh clean water for a minimum of 15 minutes holding eyelids apart. Seek medical advice if symptoms persist
Inhalation	Remove to fresh air. Seek medical advice if symptoms persist
Ingestion	Rinse mouth with plenty of water. Seek medical attention immediately. Do Not Induce Vomiting

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Non combustible
Stability	TBC
Decomposition Products	TBC

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	Wear appropriate PPE for the task. Observe Manual handling regulations and best practices.
Storage	Store in cool dry place away from ignition sources. Keep containers securely closed.

DISPOSAL MEASURES

Hazard	Measures
Non Hazardous	Dispose in accordance with local authority guidelines

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
When liquid	Soak up liquid where possible and dispose as non hazardous waste
When solid	Inert when solid, use scrappers to remove and dispose as non hazardous waste

MANUFACTURERS INFORMATION	
Manufacturers Name and Address	See attached
Manufacturers Health & Safety Data Sheet Reference	See attached
24 Hour Emergency Telephone Number	See attached
Regulatory Information: Warning Label Phrases	See below

Reference:

Text of risk phrases in Section 2

R22 -	Harmful if swallowed.
R23/24 -	Toxic by inhalation and in contact with skin.
R34 -	Causes burns.
R36/38 -	Irritating to eyes and skin.

SAFETY DATA SHEET



TOMPS PU Flexi Foam

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name: TOMPS Flexi Foam A
Company: TOMPS Ltd
220 New Road
Sutton Bridge
PE12 9QE
advice@tomps.com
Telephone 0845 658 6677
Fax 0845 658 5329

2 COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients	Conc.	CAS	EINECS	Symbols/Risk phrases
Dipropylene glycol	1 - 25%	110-98-5 2	03-821-4 Xi;	R36/38
N,N,N',N'-Tetramethyl-2,2'-oxybis(ethylamine)	0 - 0.5%	3033-62-3 T;	---	R23/24 C; R34 Xn; R22

3 . HAZARDS IDENTIFICATION

Main hazards No Significant Hazard

4. FIRST AID MEASURES

Skin contact	May cause irritation to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Eye contact	May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Inhalation	May cause irritation to mucous membranes. Move the exposed person to fresh air.
Ingestion	May cause irritation to mucous membranes. DO NOT INDUCE VOMITING. Seek medical attention if irritation or symptoms persist.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate to the surrounding fire conditions.
Fire hazards	Burning produces irritating, toxic and obnoxious fumes.
Protective equipment	Wear suitable respiratory equipment when necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation of the working area.
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe.
Clean up methods	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled

TOMPS Flexi Foam Part A

Revision 1
Revision date 8-8-2008
Page 1

SAFETY DATA SHEET

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.
Storage	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	Ensure adequate ventilation of the working area.
Hand protection	Chemical resistant gloves (PVC)
Eye protection	In case of splashing, wear: Approved safety goggles.
Protective equipment	Wear protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Liquid.
Colour	Clear.
Odour	Slight.
Relative density	1.02
Viscosity	680 mPas

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
-----------	---------------------------------

11. TOXICOLOGICAL INFORMATION

Toxicological information	
Dipropylene glycol	Oral Rat LD50 = 14.85 g/kg

12. ECOLOGICAL INFORMATION

No Data

13. DISPOSAL CONSIDERATIONS

General information Dispose of in compliance with all local and national regulations.

14. TRANSPORT INFORMATION

Further information The product is not classified as dangerous for carriage.

15. REGULATORY INFORMATION

Risk phrases NSH - No Significant Hazard.

TOMPS Flexi Foam Part A

Revision 1
Revision date 8-8-2008
Page 2

SAFETY DATA SHEET

16. OTHER INFORMATION

Text of risk phrases in Section 2

R22 -	Harmful if swallowed.
R23/24 -	Toxic by inhalation and in contact with skin.
R34 -	Causes burns.
R36/38 -	Irritating to eyes and skin.

Further information The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material

TOMPS Flexi Foam

Revision 1
Revision date 8-8-2008
Page 3

NAME OF HAZARDOUS SUBSTANCE USED OR CREATED (describe use or application)

HILTI HIT 50







COSHH Number 020

page 1

Assessment By	Activity	GJH	Assessment Date
	Masonry gluing		
	Persons/Groups at Risk		
	Site Operatives		

HOW IS IT HAZARDOUS

CLASSIFIED AS Irritant - Oxidising	Symbol: Xi O	R values: R36 / R43	S values: S3 / S26 / S28 / S36-37-39
-----------------------------------------------------	-----------------------------------------	-------------------------------	------------------------------------------------

					
FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES	YES	YES	YES	YES	YES
NO	NO	NO	NO	NO	NO
	X	X	X	X	X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in
appropriate boxes

	YES	NO
Is Manufacturers Safety Data Sheet attached?	X	
Are Specific Safety Precautions required in the use of the Substance?	X	
Will employees be given specific training? ie TBT or specialist training		X
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards	
RPE / Masks		X
Goggles or Spectacles	X	
Gloves, Rubber chemical proof	X	
Boots / Footwear		X
Overalls		
Other Equipment		X
Will Exposure Monitoring and /or Health Surveillance ?		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?		X
Have all necessary First-aid requirements been provided?	X	
Have Storage requirements for the substance been provided/arranged on site?	X	
FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4	Number of Sheets attached to this Assessment	

KEY HAZARDS & CONTROLS IDENTIFIED

- Irritant
- Oxidising
- DO NOT inhale gases/fumes/aerosols
- DO NOT eat, drink or smoke while working
- Keep away from food stuffs and beverages
- Avoid contact with skin and eyes
- Wear protective gloves (Nitrile) and safety glasses.
- Sensitization is possible by skin contact
- DO NOT allow product to reach water bodies or sewage systems
- DO NOT allow to enter the ground/soil
- Keep away from ignition sources – DO NOT smoke.
- Avoid heat.
- Store in cool, dry locations

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Instantly wash with water and soap and rinse thoroughly.
Eye Contact	Rinse opened eye for several minutes under running water. Then consult doctor.
Inhalation	Take affected persons into the open air and position comfortably
Ingestion	Rinse out mouth and then drink plenty of water.

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Water spray jet, Alcohol resistant foam, CO2, Powder Extinguishers or sand – DO NOT use full water jet extinguisher.
Stability	To avoid thermal decomposition. DO not overheat
Decomposition Products	NONE KNOWN.

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	The usual precautionary measures for handling chemicals must be observed. Keep away from heat and direct sunlight. Keep ignition sources away - Do not smoke.
Storage	Store in cool and dry locations Store away from foodstuffs. Protect from heat and direct sunlight.

DISPOSAL MEASURES

Hazard	Measures
Hazardous – Flammable	After curing, the product can be disposed of with household waste – code 20 01 27 Un-used / Un-cured products must be disposed of in accordance with official regulation. – Hazardous waste via a licensed carrier.

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Non-Hazardous	Wear protective clothing. Keep away from ignition sources Ensure adequate ventilation Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil. Collect mechanically. Dispose of the material collected according to regulations.

MANUFACTURERS INFORMATION

Manufacturers Name and Address	Hilti (Great Britain) Ltd 1 Trafford Wharf Road Trafford park Manchester M17 1BY
Manufacturers Health & Safety Data Sheet Reference	TBC
24 Hour Emergency Telephone Number	0044 161 886 1000
Regulatory Information: Warning Label Phrases	See below

Reference:

Xi Irritant
O Oxidising

Hazard-determining components of labelling:
dibenzoyl peroxide

Risk phrases:
36 Irritating to eyes.
43 May cause sensitisation by skin contact.

Safety phrases:
3 Keep in a cool place.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of soap and water.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Relevant R-phrases
2 Risk of explosion by shock, friction, fire or other sources of ignition.
36 Irritating to eyes.
43 May cause sensitisation by skin contact.
7 May cause fire.

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

Date of revision: July 24, 2000

Replaces edition of: March 02, 1999

1. Chemical product and company identification

Product name: Hilti HIT-HY150

Manufacturer: Hilti GmbH Hiltistrasse 6, D-86916 Kaufering

Importer: Hilti (GB) Ltd. 1 Trafford Wharf Road, Trafford Park,
Manchester M17 1BY

Phone: 0800 886 100

Fax: 0800 886 200

Emergency telephone number:

i

2. Composition / Information on ingredients

Adhesive mortar, packaged in a 330-ml two-component foil pack

Adhesive mortar, packaged in an 1100-ml two-component plastic cartridge

Component A: Urethane methacrylate resin with inorganic filler
contains 10-15 % hydroxypropyle methacrylate CAS-No.: 27813-02-1 (Xi: R 36, R43)

Component B: Dibenzoyl peroxide with inert filler as a paste
contains 5-10% dibenzoyl peroxide CAS-No.: 94-36-0 (O; R7, Xi; R36, R43)

3. Hazard identification

Component A: Irritating to eyes. Skin contact may cause sensitization.

Component B: Oxidizing. Skin contact may cause sensitization.

Mixture A + B: Irritating to eyes. Skin contact may cause sensitization.

4. First - aid measures



Material Safety Data Sheet

according to 91/155/EEC

Printing date: 20.12.2002

Page 2 of 7

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

Eyes: Immediately flush with plenty of water for at least 15 minutes. Get medical advice.

Skin: Remove contaminated clothing. Wash with soap and water.

Inhalation: Upon breathing in a higher quantity of vapor remove to fresh air. Get medical advice, if necessary.

Ingestion: Rinse immediately, after that drink plenty of water. Get medical advice.

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

5. Fire-fighting measures

Extinguishing media:

suitable: carbon dioxide, dry chemical, foam, water spray

not to be used: --

Special fire-fighting procedures:

In case of fire poisonous or irritating gas may be generated. Wear self-contained breathing apparatus and protective clothing.

Medical attention is necessary for symptoms which obviously come from the inhalation of the combustion fumes.

Hazardous combustion products:

COx, NOx, water, carbon

6. Accidental release measures

Personal precautions:

Remove ignition sources. Ensure adequate ventilation or self-contained breathing apparatus. Avoid contact with eyes or skin.

Environmental precautions:

Keep away from drains, surface-water, ground-water, and soil.

Cleaning procedures:

Take up by mechanical means. Remove remainder with solvent or liquid-binding material. Disposal according to local regulations.

7. Handling and storage

7.1 Handling:

Avoid contact with skin, eyes and clothing.

Observe expiry date on connection of foilpack or label on cartridge.

7.2 Storage:

Store in original packing in a cool (+5°C to +25°C) and dark place.

Keep away from direct sunlight.

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

8. Exposure control and personal protection

Respiratory protection: --
Eye protection: safety glasses
Hand protection: chemical resistant gloves,
e.g. nitril-coated cotton gloves
Other: protective work clothing

Industrial hygiene:

Do not breathe vapour. Avoid contact with eyes and skin. Remove soiled or soaked clothing at once. Upon skin contact, clean with a mild cleanser (polyethyleneglycole) then wash with soap and water. Use a handcream.

9. Physical and chemical properties

Form: paste
Colour: grey
Odour: like ester

Changes in condition: component A: polymerisation > 110°C
component B: decomposition
temperature dibenzoyl peroxide
>50°C

Density:

Density [g/cm³] (°C) 1,7 (20)
Bulk density [kg/cm³] not applicable

Vapour pressure [mbar] (°C) component A: < 0,1 (20)

Viscosity: component B: not relevant

Viscosity [Pa·s] (°C) about 70 (23) DIN 53 015
Efflux time 4 mm nozzle [s] above 20 (23) DIN 53 211
Efflux time 8 mm nozzle [s] ---

Solubility [g/l] (°C):

in water component A: insoluble
component B: insoluble
in Organic solvents

pH-value (g/l H₂O; °C): Component A: not relevant
component B: 6 (pure)

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

Flash point [°C]:	component A: >100 component B: not relevant	DIN 53 213
Ignition temperature [°C]:	not determined	DIN 51 794
Explosive limit [vol%]:	lower: not determined upper: not determined	
Thermic decomposition [°C]	component B: decomposition temperature (SADT)dibenzoyl peroxide>80°C	
Autoignition temperature [°C]:	Component B: > 400°C	ASTM D 2155

10. Stability and reactivity

Conditions to avoid:

At high storage temperature, in component B the dibenzoylperoxide will start decomposing and the generated carbon dioxide will cause the foil-pack to swell. Thus the foilpack will become unserviceable.

Materials to avoid:

None

Hazardous decomposition products:

None, if used in the intended purpose.

11. Toxicological information

The classification takes place according to the determination process in 88/379/EEC. Local contact with eyes causes irritation. Local contact with skin may cause sensitization. (Dibenzoyl peroxide and hydroxypropyle methacrylate)

12. Ecological information

Keep away from drains, surface-water, ground-water and soil.
Class of risk for water: 2

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

13. Disposal considerations

Our product packaging bears the „Green Spot“ 

Emptied containers can be disposed of via the Dual System in Germany (yellow bin).

Full or partly emptied containers, whose contents have become unusable, e.g. expiry date exceeded or container damaged, must be collected separately and disposed of as special waste, while observing the respective authorities' regulations.

Kind of waste: (EC Directive 93/259/EEC part 2)

On handling over small quantities to communal / municipal collection points:

EAK-No. 200112 (.....adhesives and sythetik resins)

Disposal of large quantities via disposal companies:

EAK-No. 080402 (old adhesives and sealants containing no halogenated solvents)

Recommandation to avoid special waste: Dispense contents of unusable containers through the static mixer in the proper way. The cured adhesive is inert and may be disposed of in remaining waste. The empty packaging can be put in the „Yellow bin“.

14. Transport information

GGVSee/IMDG-Code: --

GGVE/GGVS: --

UN-Nr.: --

RID/ADR: --

ICAO/IATA/DGR: --

ADNR: --

No dangerous good in the meaning of the above regulations.

15. Regulatory information

Classification according to guidelines 67/548 EEC and 88/379 EEC as well as to their supplements.

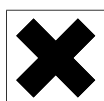
HIT is an oxidizing and irritating preparation.

Observe the usual precautionary measures for handling chemicals.

Labelling:

Symbols:

Danger identification Xi, irritant



O , oxidizing
contains dibenzoyl peroxide,
hydroxypropyle methacrylate

Company: Hilti (GB) Ltd. 1Trafford Wharf Road, Trafford Park,
Manchester M17 1 BY

Phone: 0800 886 100

Telefax: 0800 886 200

Product name: Hilti HIT-HY150

Risk-phrases:

R 36 Irritating to eyes.
R43 May cause sensitization by skin contact.

Safety phrases:

S3 Keep in a cool place.
S37/39 Wear suitable gloves and eye protection.
S26 In case of contact with eyes, rinse immediately with plenty
 of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of
 soap and water.

Further information: Observe: Council Directive 94/33/EC of 22 June 1994 on
the protection of young people at work § 2 and / or
(DE) children and young persons act § 22, § 29

16. Other information

Body issuing data sheet:
Hilti Entwicklung Elektrowerkzeuge GmbH
Hiltistrasse 26 D-86916 Kaufering Tel: 0049 8191 906310

All information and recommendation contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.



COSHH Assessment

NAME OF HAZARDOUS SUBSTANCE USED OR CREATED
(describe use or application)

PETROLEUM FUEL – Fuel for Engines

COSHH Number 021

page 1

Assessment By	Activity	Review Date	Assessment Date
C.KEMBER	Re-Fueling petrol tools and storage containers		
Persons/Groups at Risk			
Site Operatives – Fueling operatives			

HOW IS IT HAZARDOUS

CLASSIFIED AS	Symbol:	R values:	S values:
Toxic / Dangerous to Environment / Extremely Flammable	T N F+	R10, R11, R51-53, R38, R67	S23, S16, S36/37, S24, S61, S62

FLAMMABLE	TOXIC	IRRITANT	OXIDISING	HARMFUL	CORROSIVE
YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
X	X	X	X	X	X

Insert **X** in appropriate boxes

THIS ASSESSMENT IS ONLY VALID FOR SUBSTANCE USE IN OPEN AIR
(or in well-ventilated locations)

Insert **X** in appropriate boxes

		YES	NO
Is Manufacturers Safety Data Sheet attached?	Attach Sheet if YES	X	
Are Specific Safety Precautions required in the use of the Substance?	Provide details if YES	X	
Will employees be given specific training? ie TBT or specialist training	Attach details if YES	X	
Will adequate Personal Protective Equipment be provided for employees?	PPE Standards		
RPE / Masks	BS EN149	X	
Goggles or Spectacles	BS EN 166b	X	
Gloves, Rubber chemical proof	BS EN420	X	
Boots / Footwear	BS EN345	X	
Overalls			
Other Equipment	Attach details if YES		
Will Exposure Monitoring and /or Health Surveillance ?	Attach details if YES		X
Does this Substance need to be disposed of by an Authorised Waste Disposal Contractor?		X	
Have all necessary First-aid requirements been provided?		X	
Have Storage requirements for the substance been provided/arranged on site?		X	

FIRST AID, FIRE FIGHTING, STORAGE & HANDLING, DISPOSAL AND ACCIDENTAL RELEASE INSTRUCTIONS ARE PROVIDED ON PAGES 3 & 4

Number of Sheets attached to this Assessment

10

KEY HAZARDS & CONTROLS IDENTIFIED

- Toxic
- Extremely flammable
- Dangerous for the environment
- Extremely flammable
- May cause cancer
- Harmful may cause lung damage if swallowed.
- Irritating to skin
- Vapours may cause drowsiness and dizziness
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- If Swallowed do not induce vomiting, seek medical advice.
- Do not breath vapour
- Keep away from sources of ignition – No smoking
- Wear suitable clothing and gloves
- Avoid contact with skin
- Avoid release to the environment. Refer to special instructions/Safety data Sheet
- Can release vapours that readily form flammable mixtures.
- Vapour accumulations can flash or explode.
- May cause lung damage if swallowed
- Repeat exposure may cause skin dryness or cracking
- May be irritating to the eyes, nose throat and lungs
- High pressure injection under the skin may cause serious damage.
- Do not use as a cleaning agent or other use than intended.
- Do not siphon by mouth
- Ensure that all operatives carrying out refuelling are trained in local spillage procedures(including safe use of spill kits)
- Ensure PPE is worn when refuelling (impervious gloves, eye protection)
- Common sense always to prevail when using substances.
- Mobile fuel tanks must be “bunded”
- All refuelling to take place at designated point only.
- Ensure the equipment to be refuelled is switched off.
- Ensure that there are no naked flames-hot works in the vicinity of the refuelling area, No Smoking whilst refuelling.
- Ensure that a spill tray is in place to minimize spillage.
- On completion of refuelling replace nozzle in bunded / secure housing to minimize spillage.
- Ensure refuelling pipe is not leaking.
- **POSSIBLE IRRIVERSABLE EFFECTS FOLLOWING PROLONGED AND REPEATED SKIN EXPOSURE. MAY ENTER LUNGS AND CAUSE DAMAGE IF SWALLOWED. MAY CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT, HYDROGEN SULPHIDE MAY BE RELEASED WHEN HEATED, EXPOSURE TO VAPOUR / MIST MAY CAUSE DIZZINESS AND DROWSINESS.**

FIRST AID INSTRUCTIONS

Route of Exposure, or Type of Injury	First Aid Treatment
Skin Contact	Wash skin as soon as possible with soap and water. Change contaminated clothing and laundry before reuse. Get medical advice. Any injection of fuel under the skin should be considered an EMERGENCY – get Medical Advice URGENTLY.
Eye Contact	Wash out thoroughly with large amounts of water, for at least 15 minutes. If redness and/or irritation continues get medical advice.
Inhalation	In case of exposure to intense concentrations of vapours, fumes or spray move to fresh air. and allow to rest, seek medical attention immediately.
Ingestion	Wash mouth out with water. Get medical advice immediately. DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION.

FIRE FIGHTING MEASURES

Hazard	Measures
Fire	Use water fog/spray, alcohol resistant foam, dry Chemical or Carbon dioxide extinguishers DO NOT USE WATER JET
Stability	This product is stable under normal operating conditions. Avoid Sources of ignition, elevated temperatures, water, Strong oxidising agents such as chlorates, nitrates and peroxides.
Decomposition Products	No hazardous decomposition products will be evolved at ambient temperatures. However, incomplete Combustion and thermolysis produces potentially toxic gases such as, carbon monoxide, carbon dioxide, Various hydrocarbons, aldehydes and soot

STORAGE AND HANDLING

Hazard	Measures
Handling and Usage	The design and operation of bulk storage and fuel systems must comply with national legislation and recognised codes of practice. In smaller quantities containers such as drums should be stored in cool, well ventilated surroundings, away from all sources of ignition. Electrical equipment and fittings must comply with local fire prevention regulations for this class of flammable product. Store at room Temperature away from moisture, heat or any ignition sources. DO NOT SMOKE AVOID INHALATION OF VAPOURS AVOID CONTACT WITH THE SKIN OR MUCOUS MEMBRANES DO NOT USE MOBILE PHONES DURING HANDLING
Storage	Keep the product away from food and beverages. Prevent the formation of vapours, mist and aerosols. Wear safety shoes and fully covering protective clothing GENERATING NO STATIC ELECTRICITY. Never weld, drill, grind or saw any empty containers Avoid repeated contact with the skin as this may cause skin conditions, which may also be aggravated by Contact with soiled clothing. Avoid contact with oxidisers. Remove any contaminated clothing immediately and laundry before re-use. Always use the correct grounding procedure. Store and handle in closed or properly vented containers. Ensure compliance with statutory requirements for storage and handling. Regularly check for and prevent potential leaks from containers. Installations should be designed to avoid pollution of soil and water. Use only containers, joints pipes etc. made of material which is suitable for use with aromatic hydrocarbons.

DISPOSAL MEASURES

Hazard	Measures
Pollution of water courses or drains	Do not allow to enter water courses. Licensed carriers must collect part used containers and empty containers for disposal, re-cycling. DO NOT CUT, BURN, WELD, SOLDER, GRIND, DRILL OR EXPOSE CONATINERS TO SOURCES OF HEAT.

ACCIDENTAL RELEASE MEASURES

Hazard	Measures
Spillage	Contain using spill kit or inert material i.e. Dry earth or Sand

MANUFACTURERS INFORMATION

Manufacturers Name and Address	Dependent on supplier
Manufacturers Health & Safety Data Sheet Reference	
24 Hour Emergency Telephone Number	To be completed on site -
Regulatory Information: Warning Label Phrases	See below

NOTE – GB Petroleum is used as an example only.

Reference:**15 Regulatory Information**

Labelling:

Symbol(s): Skull & crossbones on orange background,
Dead Fish and Tree (n)
Flames on orange background

Classification Toxic, Extremely flammable, Dangerous for the environment
Extremely flammable

May cause cancer
Harmful may cause lung damage if swallowed.
Irritating to skin
Vapours may cause drowsiness and dizziness
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
If Swallowed do not induce vomiting, seek medical advice.
Do not breath vapour
Keep away from sources of ignition – No smoking
Wear suitable clothing and gloves
Avoid contact with skin
Avoid release to the environment. Refer to special instructions/Safety data Sheet