

**Material Safety Data Sheet (MSDS) –  
Smartseal Oil Remover (Tarmac & Asphalt)**

**1. DESCRIPTION / PROPERTIES (nature, reactivity):**

A unique biological cleaner designed to remove residues of oils, greases and other hydrocarbon products by enhanced bacterial degradation. Particularly effective at removing oil from tarmac etc. Aqueous suspension of selected natural bacteria, nutrients and cleaning agents. Cleans off hydrocarbon residues by bacterial oxidation to carbon dioxide and water, with no adverse environmental impact or harmful residues. Application rate is approximately 0.5 – 2.0 square metres per litre depending on surface porosity.

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Non-pathogenic organisms – Class 1 (European Federation of Biotechnology)

HAZARDOUS COMPONENT	CAS NO	EINECS	% CONCENTRATION	HAZARD	RISK PHRASES	WEL
EDTA Tetra sodium salt			0 → 2%	X <sub>i</sub>	R36/38	-
Dipropylene glycol mono methyl ether	34590-94-8	252-104-2	0 → 5%	-	-	WEL
Isopropylamine dodecylbenzene sulphonate	-	247-556-2	0 → 5%	X <sub>i</sub>	R41, 38	-
Alcohol ethoxylate	-	Polymer	0 → 5%	X <sub>i</sub>	R22, 41	-

**3. HAZARD IDENTIFICATION**

- a) **Fire/Explosion Hazard (stability, flammability, combustion products):**  
Product is not classified as combustible or flammable.
- b) **Health Hazard (inhalation, ingestion, contact with skin or eyes):**  
Irritating to eyes. Avoid contact with skin and in particular, with the eyes. Low risk from inhalation but avoid excessive inhalation of vapour e.g. from sprays. Low order of acute oral toxicity but do not ingest.
- c) **Environmental Hazard:**  
Product is not classified as hazardous to the environment.

**4. FIRST AID MEASURES**

- INHALATION** - Low risk in normal usage. Remove to fresh air. Rest and keep warm. If symptoms of distress persist seek medical attention.  
Wash affected area thoroughly with clean water. Remove contaminated clothing
- SKIN CONTACT** - and  
launder before re-use.
- EYE CONTACT** - Irrigate with plenty of clean water. Obtain medical advice.  
Do not swallow, wash out mouth with water. If swallowed drink water and
- INGESTION** - obtain  
medical attention. Do not induce vomiting.

## 5. FIRE FIGHTING MEASURES

### Suitable extinguishing media:

If involved in a fire, use extinguishing media appropriate to the source of the fire.

### Protection for fire fighters:

Wear self-contained breathing apparatus. Wear protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions:

Mark out contaminated area with signs and prevent access to unauthorised personnel.

### Environmental Precautions:

Prevent discharge of large quantities of concentrate to drain or water courses.

### Clean up Procedures:

Disperse small spillages with large excess of water. Large spillages - contain, absorb and pick up, place in sealed containers for disposal via licensed contractor. Wash down traces with excess of water.

## 7. HANDLING AND STORAGE

### Handling:

After handling wash hands and face with soap and water.

### Storage:

May be stored for periods over six months in plastic containers as supplied. Avoid temperatures above 45°C and protect from frost.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Workplace Exposure Limits

(2-methoxymethylethoxy)propanol 8hr TWA 50ppm / 308mg/m<sup>3</sup> (EH40: 2005) Under normal conditions of use this limit is unlikely to be exceeded.

**Engineering Controls:** Provide eyewash station. Ensure good natural ventilation.

**Personal Protection:Hand:** Use protective gloves made of neoprene or nitrile.

**Eyes:** Wear safety glasses.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Density at 20°C	:	1.005 – 1.015
Vapour Pressure at 20°C	:	Essentially Water Vapour
Solubility in Water	:	Soluble
pH	:	7.0 – 9.0
Flash Point	:	N/A

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials to avoid:** No known adverse reactions.

**Hazardous decomposition products:** No typical hazardous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

### Health Effects:

**Respiratory:** Not likely to occur.

**Skin:** May be irritating to skin on prolonged or repeated skin contact.

**Eyes:** Irritating to eyes.

**Ingestion:** Low acute toxicity. May cause irritation to mucous membranes in mouth, throat, stomach and intestinal canal.

#### Toxicological Data:

For individual components:

Component	Acute Toxicity
Dipropylene glycol mono methyl ether	LD50 oral (rat): 5000mg/kg
Isopropylamine dodecyl benzene sulphonate	LD50 oral (rat): >2000mg/kg
Alcohol ethoxylate	Oral: 200< LD50<2000mg./kg Dermal: LD50>2000mg/kg Inhalation: LC50>5mg/L

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity:

For individual components:

Component	Acute Toxicity
Alcohol ethoxylate	Fish: 1< LC50<10mg./L Daphnia: 1< LC50<10mg./L Algae: 1< LC50<10mg./L

#### Degradability:

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request or at the request of a detergent manufacturer.

#### Bioaccumulation:

No bioaccumulation is expected. The product is biodegradable and water-soluble.

## 13. DISPOSAL CONSIDERATION

Disperse small spillages with large excess of water. Return unwanted material to the supplier.

## 14. TRANSPORT INFORMATION

Not classified as hazardous for transportation

## 15. REGULATORY INFORMATION

Irritant Xi

R36 Irritating to eyes.

S26 In case of contact with the eyes rinse immediately with plenty of water and seek medical advice.

#### Regulatory Information:

**UK Regulatory References:** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. EH40/2005: Workplace Exposure Limits 2005.

**EC Directives:** Dangerous Preparations Directive (1999/45/EC).  
Safety Data Sheets Directive (2001/58/EC).

**Approved Code of Practice:** The Compilation of Safety Data Sheets.

## 16. OTHER INFORMATION

**PLEASE NOTE:**

The above information is based on the present state of our knowledge at the time of publication. It is given in good faith, no warranty is implied with respect to quality or specification of product. The user must satisfy himself that the product is entirely suitable.

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