



## BIO TECHNICS LIMITED

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# MATERIAL SAFETY DATA SHEET

## PRODUCT

### OT- 4

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

A unique biological cleaner designed to remove residues of oils, greases and other hydrocarbon products by enhanced bacterial degradation. 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 – 2.5 square metre per litre depending on surface porosity.

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENT	CAS NO	EINECS	% CONCENTRATION	HAZARD	RISK PHRASES	WEL
Orange terpene	8028-48-6	232-433-8	10 → 30%	X <sub>n</sub>	R10,38,65,52/53	-
Dipropylene glycol mono methyl ether	34590-94-8	252-104-2	0 → 5%	-	-	WEL
Isopropylamine dodecyl benzene sulphonate	26264-05-1	247-556-2	0 → 5%	X <sub>i</sub>	R41, 38	-
Alcohol ethoxylate	*	*	0 → 5%	X <sub>n</sub>	R22, 41	-

\* Proprietary status pending

#### 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):**

Not classified as hazardous for use. Avoid contact with skin and in particular, with the eyes. Low risk from inhalation but avoid excessive inhalation of vapour e.g. on heating etc. Low order of acute oral toxicity but do not ingest.

c) **Environmental Hazard:**

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.
- SKIN CONTACT** - Wash affected area thoroughly with clean water. Remove contaminated clothing and launder before re-use.
- EYE CONTACT** - Irrigate with plenty of clean water. Obtain medical advice.
- INGESTION** - Do not swallow, wash out mouth with water. If swallowed drink water and 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 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 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

WEL (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	:	0.97 – 1.00
Vapour Pressure at 20°C	:	Essentially Water Vapour
Solubility in Water	:	Disperses
pH	:	6.5 - 7.5
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 cause irritation to skin on prolonged or repeated skin contact.

**Eyes:** May cause irritation to eyes.

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

**Toxicological Data:**

For individual components:

<b>Component</b>	<b>Acute Toxicity</b>
Dipropylene glycol mono methyl ether	LD50 oral (rat): 5000mg/kg
Orange terpenes	LD50 oral (rat): 4400mg/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:

<b>Component</b>	<b>Acute Toxicity</b>
Orange terpenes	EC50 Daphnia magna 48h 12.3mg/L
Alcohol ethoxylate	Fish: 1< LC50<10mg./L Daphnia: 1< LC50<10mg./L Algae: 1< LC50<10mg./L

**Degradability:**

All components are readily biodegradable.

**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**

Not classified as hazardous for use.

Advisory safety phrase.

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.

**Signature:** \_\_\_\_\_**Date:** 3<sup>rd</sup> April 2007