

RAW Handel und Beratungs GmbH
 Grünstraße 5
 D-79232 March-Hugstetten
 Tel. +49 (0) 7665 / 934 29 - 0
 Fax +49 (0) 7665 / 934 29 - 25
 EMail raw@raw-vertrieb.de
 www.raw-vertrieb.de

MATERIAL SAFETY DATA SHEET

PRODUCT

BIO GEL

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 1 square metre per litre depending upon surface roughness.

2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENT	CAS NO	EINECS	% CONCENTRATION	HAZARD	RISK PHRASES	OES
Orange terpene	8028-48-6	232-433-8	10 → 30%	X _n	R10,38,65,52/53	-
Dipropylene glycol mono methyl ether	34590-94-8	252-104-2	0 → 5%	-		OES
Isopropylamine dodecyl benzene sulphonate	26264-05-1	247-556-2	0 → 5%	X _i	R38, 41	-
Alcohol ethoxylate	*	*	0 → 5%	X _n	R22, 41	-
Non pathogenic organisms – Class 1 (European Federation of BioTechnology)	-	-	0 → 5%	NONE	-	-

* Proprietary status pending

3. HAZARD IDENTIFICATION

- a) **Fire/Explosion Hazard (stability, flammability, combustion products):**
 Not classified as flammable or combustible.
- b) **Health Hazard (inhalation, ingestion, contact with skin or eyes):**
 Not classified as hazardous for use. May cause irritation on prolonged or repeated skin contact. As with all surface-active chemicals, care should be taken to avoid prolonged skin contact. Low risk from inhalation. Low order of acute oral toxicity but do not ingest.
- c) **Environmental Hazard:**
 Not classified as hazardous to the environment. VOC content less than 15%.

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.

BIO GEL

FIRE FIGHTING MEASURES

Suitable extinguishing media:

Since the product is not classified as flammable, 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.

5. 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 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

Component Exposure Limits:

Component Name	Concentration in preparation	8 hour exposure limit	Short term exposure limit
(2-methoxy methylethoxy)-propanol	0 → 10%	8hr TWA 50ppm 308mg/m3	

In normal usage this limit is unlikely to be exceeded.

Engineering Controls: Provide eyewash station.

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

Eyes: Wear safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Density at 20°C: Approximately 1.1
Vapour Pressure at 20°C: Essentially Water Vapour
Solubility: Disperses
PH: 7.0 - 7.5
Flash Point: None measurable

10. STABILITY AND REACTIVITY

Stability: Stable.

Materials to avoid: No known adverse reactions. Avoid contact with strong oxidisers. Strong acids or alkalis may render the product inactive.

Hazardous decomposition products: No typical hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Health Effects

Respiratory: Not likely to occur.

Skin: May cause irritation on prolonged or repeated skin contact.

Eyes: May cause irritation.

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

BIO GEL

Toxicological Data

For individual components:

<u>Component</u>	<u>Acute Toxicity</u>
Dipropylene glycol mono methyl ether	LD50 oral (rat): 5000mg/kg
Orange terpenes	LD50 oral (rat): 4400mg/kg
Isopropylamine dodecyl benzene sulphionate	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:

<u>Component</u>	<u>Acute Toxicity</u>
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

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

14. TRANSPORT INFORMATION

Not classified as dangerous for transport.

15. REGULATORY INFORMATION

Not classified as hazardous for use.

Advisory safety phrases.

- S26** In case of contact with the eyes rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water.
S36 Wear suitable protective clothing.

Regulatory Information

UK Regulatory References: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.

EC Directives: EH40/2002: Occupational Exposure Limits 2002.
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.