



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : GRAVOCLEAN
Product code : GRAV 019.

1.2. Relevant identified uses of the substance or mixture and uses advised against

All-purpose cleaner.

1.3. Details of the supplier of the safety data sheet

Registered company name : GRAVOTECH MARKING SAS.
Address : 56, avenue Jean Jaurès.10600.La Chapelle Saint Luc.France.
Telephone : +33 (0)3 25 41 65 65. Fax : +33 (0)3 25 79 04 25.
e-mail : info@gravograph.fr
<http://www.gravograph.com>

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling :
EUH210 Safety data sheet available on request.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 5131-66-8 EC: 225-878-4 REACH: 01-2119475527-28 PROPYLENE GLYCOL MONOBUTYL ETHER	GHS07 Wng Skin Irrit. 2, H315 Eye Irrit. 2, H319		2.5 \leq x % < 10
CAS: 34590-94-8 EC: 252-104-2 REACH: 01-2119450011-60 (2-METHOXYMETHYLETHOXY)PROPANOL	GHS09 Wng Aquatic Chronic 3, H412 Aquatic Acute 1, H400 M Acute = 1	[1]	2.5 \leq x % < 10

(Full text of H-phrases: see section 16)

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.
If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Wash the skin thoroughly with soap and water or a recognised cleaner.

In the event of swallowing :

Seek medical attention, showing the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
34590-94-8	308	50	-	-	Peau

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
34590-94-8	100 ppm	150 ppm		Skin	

- Germany - AGW (BAuA - TRGS 900, 29/01/2018) :

CAS	VME :	VME :	Excess	Notes
34590-94-8		50 ppm 310 mg/m ³		1(l)

- Belgium (Arrêté du 09/03/2014, 2014) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
34590-94-8	50 ppm 308 mg/m ³			D	

- France (INRS - ED984 :2016) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
34590-94-8	50	308	-	-	*	84

- Switzerland (SUVAPRO 2017) :

CAS	VME	VLE	Valeur plafond	Notations
34590-94-8	50 ppm 300 mg/m ³	50 ppm 300 mg/m ³		

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
34590-94-8	50 ppm 308 mg/m ³	- ppm - mg/m ³		Sk	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
65 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
310 mg of substance/m³

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
1.67 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
15 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
37.2 mg of substance/m³

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Final use:	Workers.
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	44 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	270.5 mg of substance/m3
Final use:	Consumers.
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	8.75 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	16 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	33.8 mg of substance/m3

Predicted no effect concentration (PNEC):

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Environmental compartment:	Soil.
PNEC :	2.74 mg/kg
Environmental compartment:	Fresh water.
PNEC :	19 mg/l
Environmental compartment:	Sea water.
PNEC :	1.9 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	190 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	70.2 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	7.02 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	4168 mg/kg

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Environmental compartment:	Soil.
PNEC :	0.16 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.525 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0525 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	5.25 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	2.36 mg/kg
Environmental compartment:	Marine sediment.

PNEC :	0.236 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	10 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Fluid liquid.
Colour:	Green.
Odour:	Characteristic.

Important health, safety and environmental information

pH :	7.80 .
	Neutral.
Flash Point Interval :	FP > 100°C.
Vapour pressure (50°C) :	Not relevant.
Density :	0.99
Water solubility :	Dilutable.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- frost

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

No data available.

11.1.1. Substances**Acute toxicity :**

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Oral route : LD50 > 4000 mg/kg
Species : Rat

Dermal route : LD50 = 9510 mg/kg
Species : Rabbit

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Oral route : LD50 = 3300 mg/kg
Species : Rat

Dermal route : LD50 > 2000 mg/kg
Species : Rat

Inhalation route (Vapours) : LC50 > 3.5 mg/l
Species : Rat

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION**12.1. Toxicity****12.1.1. Substances**

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Fish toxicity : LC50 = 10 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 1.919 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

NOEC = 0.5 mg/l
Species : Daphnia magna
Duration of exposure : 21 days

Algae toxicity : ECr50 = 1 mg/l
Factor M = 1
Species : Selenastrum capricornutum
Duration of exposure : 72 h

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Fish toxicity : LC50 >= 100 mg/l
Species : Poecilia reticulata
Duration of exposure : 96 h

Crustacean toxicity : EC50 >= 100 mg/l
Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 560 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Biodegradability : Rapidly degradable.

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

(2-METHOXYMETHYLETHOXY)PROPANOL (CAS: 34590-94-8)

Octanol/water partition coefficient : log K_{ow} < 3.

Bioaccumulation : BCF < 100.

PROPYLENE GLYCOL MONOBUTYL ETHER (CAS: 5131-66-8)

Octanol/water partition coefficient : log K_{ow} = 1.2

Bioaccumulation : BCF < 100.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 1 (VwVwS vom 27/07/2005, KBws) : Slightly hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2017/776 (ATP 10)

- Container information:

No data available.

- Particular provisions :

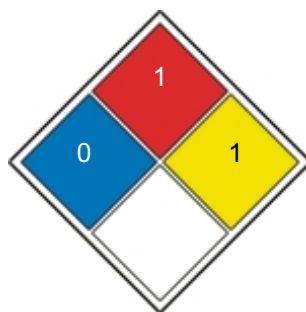
No data available.

- German regulations concerning the classification of hazards for water (WGK) :

WGK 1 (VwVwS vom 27/07/2005, KBws) : Slightly hazardous for water.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=0 Inflammability=1 Instability/Reactivity=1 Specific Risk=none

**- Swiss ordinance on the incentive tax on volatile organic compounds :**

5131-66-8

1-n-butoxypropane-2-ol

34590-94-8

2-(3-méthoxypropoxy)propane-1-ol

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.