



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : GRAVOCLEAN

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>.

Other emergency numbers

National Poisons Information Service of England: <http://npis.org> - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - LUXEMBOURG : (+352) 8002 5500 - European Emergency Number Association (EENA) : 112

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 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.
The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 5131-66-8 EC: 225-878-4 REACH: 01-2119475527-28 3-BUTOXYPROPAN-2-OL	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	Aquatic Chronic 3, H412	[1]	2.5 \leq x % < 10

(2-METHOXYMETHYLETHOXY)PROPANOL		
CAS: 25322-68-3 EC: 500-038-2		[1] 0 <= x % < 0.1
POLYETHYLENE GLYCOL 6000		

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 5131-66-8 EC: 225-878-4 REACH: 01-2119475527-28		oral: ATE = 3300 mg/kg BW
3-BUTOXYPROPAN-2-OL CAS: 34590-94-8 EC: 252-104-2 REACH: 01-2119450011-60		dermal: ATE = 9510 mg/kg BW
(2-METHOXYMETHYLETHOXY)PROPANOL		

Information on ingredients :

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

[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.
Remove and wash contaminated clothing before re-using.

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 (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m ³ :	VME-ppm :	VLE-mg/m ³ :	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, 02/2022) :

CAS	VME :	VME :	Excess	Notes
34590-94-8		50 ppm 310 mg/m ³		1(I)
25322-68-3		200 E mg/m ³		8(II)

- Australia (NOHSC: 3008, 1995) :

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

- Austria (BGBl. II Nr. 156/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
34590-94-8	50 ppm 307 mg/m ³	100 ppm 614 mg/m ³			

- Belgium (Royal decree of 11/05/2021) :

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

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m ³ :	VLE-ppm :	VLE-mg/m ³ :	Notes :	TMP No :
34590-94-8	50	308	-	-	*	84

- Switzerland (Suva 2021) :

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

25322-68-3	500 ppm			
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- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

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

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
34590-94-8	100 ppm 600 mg/m ³			skin	

- USA / AIHA WEEL (American Industrial Hygiene Association, Workplace Environmental Exposure Limit, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
25322-68-3	10 mg/m ³				

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.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

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

Physical state

Physical state :	Fluid liquid.
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Colour

Colour:	Green.
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Odour

Odour threshold :	Not stated.
Odour:	Characteristic.

Freezing point

Freezing point / Freezing range :	Not stated.
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Boiling point or initial boiling point and boiling range











Boiling point/boiling range :	Not relevant.
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Flammability

Flammability (solid, gas) :	Not stated.
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Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
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Explosive properties, upper explosivity limit (%) :	Not stated.
 Flash point	
Flash Point Interval :	FP > 100°C.
 Auto-ignition temperature	
Self-ignition temperature :	Not relevant.
 Decomposition temperature	
Decomposition point/decomposition range :	Not relevant.
 pH	
pH (aqueous solution) :	Not stated.
pH :	7.80
	Neutral.
 Kinematic viscosity	
Viscosity :	Not stated.
 Solubility	
Water solubility :	Dilutable.
Fat solubility :	Not stated.
 Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	Not stated.
 Vapour pressure	
Vapour pressure (50°C) :	Not relevant.
 Density and/or relative density	
Density :	0.99
 Relative vapour density	
Vapour density :	Not stated.

9.2. Other information

No data available.

 **9.2.1. Information with regard to physical hazard classes**

No data available.

 **9.2.2. Other safety characteristics**

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 hazard classes as defined in Regulation (EC) No 1272/2008**

No data available.

 **11.1.1. Substances****Acute toxicity :**

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

Oral route : LD₅₀ > 5000 mg/kg

Species : Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :
LD50 = 9510 mg/kg bodyweight/day
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

3-BUTOXYPROPAN-2-OL (CAS: 5131-66-8)

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

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

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

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards**SECTION 12 : ECOLOGICAL INFORMATION****12.1. Toxicity****12.1.1. Substances**

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

Fish toxicity :
LC50 = 10000 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity :
EC50 = 1919 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 0.5 mg/l
Species : Daphnia magna
OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity :
ECr50 = 969 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 96 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC > 969 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 96 h

3-BUTOXYPROPAN-2-OL (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.

3-BUTOXYPROPAN-2-OL (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} = 0.004
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Bioaccumulation : BCF < 100.

3-BUTOXYPROPAN-2-OL (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. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 1 : 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, 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 or ID 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

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14.7. Maritime transport in bulk according to IMO instruments

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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. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

<https://echa.europa.eu/substances-restricted-under-reach>.**Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBWs) :

WGK 1 : Slightly hazardous for water.

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.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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.