



GRILL MASTER

Safety Data Sheet acc. to 29 CFR 1910.1200 App D

SECTION 1: Identification

1.1 Product identifier

Trade name **GRILL MASTER**
 Alternative number(s) GRM

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

Relevant identified uses General use

1.3 Details of the supplier of the safety data sheet

Verax Chemical Company
 20102 Broadway Ave
 Snohomish WA 98296
 United States

Telephone: +1 (360) 668-2431
 e-mail: info@veraxproducts.com
 Website: www.veraxproducts.com

1.4 Emergency telephone number

Emergency information service US: (800) 535-5053 | INT: 1 (352) 323-3500

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section.	Hazard class.	Category.	Hazard class and category.	Hazard statement.
A.2.	Skin corrosion/irritation.	1A.	Skin Corr. 1A.	H314.
A.3.	Serious eye damage/eye irritation.	1.	Eye Dam. 1.	H318.
A.6.	Carcinogenicity.	2.	Carc. 2.	H351.
A.7.	Reproductive toxicity.	2.	Repr. 2.	H361f.
A.9.	Specific target organ toxicity - repeated exposure.	2.	STOT RE 2.	H373.
B.16.	Substance or mixture corrosive to metals.	1.	Met. Corr. 1.	H290.

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis. Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05, GHS08



- Hazard statements

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H351 Suspected of causing cancer.
 H361f Suspected of damaging fertility.
 H373 May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P201	Obtain special instructions before use.
P234	Keep only in original container.
P260	Do not breathe dusts or mists.
P280	Wear eye protection/face protection.
P301+P330+P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container to industrial combustion plant.

2.3 Other hazards

Hazards not otherwise classified

May be harmful if swallowed (GHS category 5: acutely toxic - oral).

Harmful to aquatic life (GHS category 3: aquatic toxicity - acute).











SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance.	Identifier.	Wt%.	Classification acc. to GHS.	Pictograms.
Triethanolamine.	CAS No. 102-71-6.	25 - < 50.	Eye Dam. 1 / H318. Repr. 2 / H361f.	 
Ethoxylated Alcohol Mixture.	CAS No. 66455-15-0. 68551-12-2. 68002-97-1.	5 - < 10.	Acute Tox. 4 / H302. Eye Dam. 1 / H318.	 
Potassium hydroxide.	CAS No. 1310-58-3.	5 - < 10.	Acute Tox. 4 / H302. Skin Corr. 1A / H314. Eye Dam. 1 / H318. Met. Corr. 1 / H290.	 
2-Butoxyethan-1-ol.	CAS No. 111-76-2.	1 - < 5.	Acute Tox. 4 / H302. Acute Tox. 4 / H332. Skin Irrit. 2 / H315. Eye Irrit. 2 / H319. Flam. Liq. 4 / H227.	
2,2'-iminodiethanol.	CAS No. 111-42-2.	1 - < 5.	Acute Tox. 4 / H302. Skin Irrit. 2 / H315. Eye Dam. 1 / H318. Carc. 2 / H351. STOT RE 2 / H373.	  

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

Advice on how to clean up a spill

dilute with plenty of water

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

Control of the effects

Protect against external exposure, such as

frost

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits).

Country.	Name of agent.	CAS No.	Identifier.	TWA [ppm].	TWA [mg/m ³].	STEL [ppm].	STEL [mg/m ³].	Ceiling-C [ppm].	Ceiling-C [mg/m ³].	Notation.	Source.
US.	Triethanolamine.	102-71-6.	PEL (CA).		5.						Cal/ OSHA PEL.
US.	Triethanolamine.	102-71-6.	TLV®.		5.						AC- GIH® 2022.
US.	Diethanolamine.	111-42-2.	PEL (CA).	0.46.	2.						Cal/ OSHA PEL.
US.	Diethanolamine.	111-42-2.	REL.	3 (10 h).	15 (10 h).						NIOSH REL.
US.	Diethanolamine.	111-42-2.	TLV®.		1.					Iv, H.	AC- GIH® 2022.
US.	2-Butoxyethanol.	111-76-2.	REL.	5 (10 h).	24 (10 h).						NIOSH REL.
US.	2-Butoxyethanol.	111-76-2.	TLV®.	20.							AC- GIH® 2022.
US.	2-Butoxyethanol.	111-76-2.	PEL.	50.	240.						29 CFR 1910.10 00.
US.	2-Butoxyethanol (EGBE) (glycol monobutyl ether).	111-76-2.	PEL (CA).	20.	97.						Cal/ OSHA PEL.
US.	Potassium hydroxide.	1310-58-3.	REL.						2.		NIOSH REL.

Occupational exposure limit values (Workplace Exposure Limits).

Country.	Name of agent.	CAS No.	Identifier.	TWA [ppm].	TWA [mg/m³].	STEL [ppm].	STEL [mg/m³].	Ceiling-C [ppm].	Ceiling-C [mg/m³].	Notation.	Source.
US.	Potassium hydroxide.	1310-58-3.	TLV®.						2.		ACGIH® 2022.
US.	Potassium hydroxide (caustic potash).	1310-58-3.	PEL (CA).						2.		Cal/ OSHA PEL.

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
H	absorbed through the skin
iv	inhalable fraction and vapor
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Biological limit values.

Country.	Name of agent.	Parameter.	Notation.	Identifier.	Value.	Source.
US.	2-Butoxyethanol.	Butoxyacetic acid (BAA).	Hydr, crea.	BEI®.	200 mg/g.	ACGIH® 2022.

Notation

crea	creatinine
hydr	hydrolysis

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	red
Odor	characteristic

Other safety parameters

pH (value)	13 (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	1 hPa at 108 °C
Density	9.24 lb/gal
Vapor density	this information is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". Substance or mixture corrosive to metals.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed.

Acute toxicity estimate (ATE) of components of the mixture.

Name of substance.	CAS No.	Exposure route.	ATE.
Ethoxylated Alcohol Mixture.	66455-15-0. 68551-12-2. 68002-97-1.	Oral.	1,000 mg/kg.
Potassium hydroxide.	1310-58-3.	Oral.	333 mg/kg.
2-Butoxyethan-1-ol.	111-76-2.	Oral.	1,414 mg/kg.
2-Butoxyethan-1-ol.	111-76-2.	Inhalation: vapor.	11 mg/4h.
2,2'-iminodiethanol.	111-42-2.	Oral.	1,100 mg/kg.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans.

Name of substance.	CAS No.	Classification.	Number.
2-Butoxyethan-1-ol.	111-76-2.	3.	
2,2'-iminodiethanol.	111-42-2.	2B.	
Triethanolamine.	102-71-6.	3.	

Legend

2B	Possibly carcinogenic to humans
3	Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life.

Aquatic toxicity (acute) of components of the mixture.

Name of substance.	CAS No.	Endpoint.	Value.	Species.	Exposure time.
Triethanolamine.	102-71-6.	LC50.	11,800 mg/l.	Fish.	96 h.
Triethanolamine.	102-71-6.	EC50.	609.9 mg/l.	Aquatic invertebrates.	48 h.
Triethanolamine.	102-71-6.	ErC50.	512 mg/l.	Algae.	72 h.
Ethoxylated Alcohol Mixture.	66455-15-0. 68551-12-2. 68002-97-1.	ErC50.	15 – 20 mg/l.	Algae.	72 h.
Ethoxylated Alcohol Mixture.	66455-15-0. 68551-12-2. 68002-97-1.	EC50.	5 – 6 mg/l.	Daphnia magna.	48 h.
Ethoxylated Alcohol Mixture.	66455-15-0. 68551-12-2. 68002-97-1.	LC50.	15 – 16 mg/l.	Fish.	96 h.
2-Butoxyethan-1-ol.	111-76-2.	LC50.	1,474 mg/l.	Fish.	96 h.
2-Butoxyethan-1-ol.	111-76-2.	EC50.	1,550 mg/l.	Aquatic invertebrates.	48 h.
2-Butoxyethan-1-ol.	111-76-2.	ErC50.	1,840 mg/l.	Algae.	72 h.
2,2'-iminodiethanol.	111-42-2.	LC50.	460 mg/l.	Fish.	96 h.
2,2'-iminodiethanol.	111-42-2.	EC50.	30.1 mg/l.	Aquatic invertebrates.	48 h.
2,2'-iminodiethanol.	111-42-2.	ErC50.	9.5 mg/l.	Algae.	72 h.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Dilute with plenty of water.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT	UN 1814
IMDG-Code	UN 1814
ICAO-TI	UN 1814

14.2 UN proper shipping name

DOT	Potassium hydroxide solutions
IMDG-Code	POTASSIUM HYDROXIDE SOLUTION
ICAO-TI	Potassium hydroxide solution

14.3 Transport hazard class(es)

DOT	8
IMDG-Code	8
ICAO-TI	8

14.4 Packing group

DOT	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN1814, Potassium hydroxide solutions, 8, II
Reportable quantity (RQ)	17,104 lbs (7,765 kg) (Potassium hydroxide) (Methanol)
Danger label(s)	8



Special provisions (SP)	B2, IB2, T7, TP2
ERG No	154

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	8



Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-A, S-B
Stowage category	A

Segregation group 18 - Alkalis

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 8



Special provisions (SP) A3

Excepted quantities (EQ) E2

Limited quantities (LQ) 0,5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings.

Name of substance.	CAS No.	Remarks.	Effective date.
2,2'-iminodiethanol.	111-42-2.		1986-12-31.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance.	CAS No.	Remarks.	Statutory code.	Final RQ pounds (Kg).
Potassium hydroxide.	1310-58-3.		1.	1000 (454).
2,2'-iminodiethanol.	111-42-2.		3.	100 (45,4).

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act
3 "3" indicates that the source is section 112 of the Clean Air Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance.	CAS No.	Functionality.	Authoritative Lists.
Tall Oil Fatty Acids.			CA NLS.
2-Butoxyethan-1-ol.	111-76-2.		OEHHA RELS.
2,2'-iminodiethanol.	111-42-2.		CA TACs. IARC Carcinogens - 2B. OEHHA RELS. Prop 65.
Methanol.	67-56-1.		CA TACs. NTP OHAT - Repr. or Dev. Toxicants. OEHHA RELS. Prop 65.

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance.	CAS No.	DEP CODE.	PBT / HHS / LHS.	PBT / HHS Threshold.	De Minimis Concentration Threshold.
Potassium hydroxide.	1310-58-3.				1.0 %.
2-Butoxyethan-1-ol.		1022.			1.0 %.
2,2'-iminodiethanol.	111-42-2.				1.0 %.

- Hazardous Substances List (MN-ERTK)

Name of substance.	CAS No.	References.	Remarks.
Potassium hydroxide.	1310-58-3.	A.	
2-Butoxyethan-1-ol.	111-76-2.	A, O.	Skin.
2,2'-iminodiethanol.	111-42-2.	A.	
Triethanolamine.	102-71-6.	A.	

Legend

- A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
 O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division
 skin If a potential for absorption from skin contact merits special consideration, the word "skin" follows the substance name.

- Hazardous Substance List (NJ-RTK)

Name of substance.	CAS No.	Remarks.	Classifications.
Potassium hydroxide.	1310-58-3.		CO R1
2-Butoxyethan-1-ol.	111-76-2.		CA F2
2,2'-iminodiethanol.	111-42-2.		CO
Triethanolamine.	102-71-6.		

Legend

- CA Carcinogenic
 CO Corrosive
 F2 Flammable - Second Degree
 R1 Reactive - First Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory.	CAS No.	Classification.
POTASSIUM HYDROXIDE (K(OH)).	1310-58-3.	E.
ETHANOL, 2-BUTOXY-.	111-76-2.	
ETHANOL, 2,2'-IMINOBIS-.	111-42-2.	E.
ETHANOL, 2,2',2"-NITRILOTRIS-.	102-71-6.	

Legend

- E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance.	CAS No.	References.
Potassium hydroxide.	1310-58-3.	T, F.
2-Butoxyethan-1-ol.	111-76-2.	T.
2,2'-iminodiethanol.	111-42-2.	T, F.
Triethanolamine.	102-71-6.	F.

Legend

- F Flammability (NFPA®)
 T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals.

Name acc. to inventory.	CAS No.	Remarks.	Type of the toxicity.
Diethanolamine.	111-42-2.		Cancer.

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category.	Rating.	Description.
Chronic Health.	*. 3.	Chronic (long-term) health effects may result from repeated overexposure. Major injury likely unless prompt action is taken and medical treatment is given.
Flammability.	1.	Material that must be preheated before ignition can occur.
Physical hazard.	0.	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.
Personal protection.	-.	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category.	Degree of hazard.	Description.
Flammability.	1.	Material that must be preheated before ignition can occur.
Health.	3.	Material that, under emergency conditions, can cause serious or permanent injury.
Instability.	0.	Material that is normally stable, even under fire conditions.
Special hazard.		

National inventories

Country.	Inventory.	Status.
US.	TSCA.	Not all ingredients are listed.

Legend

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations.
29 CFR 1910.1000.	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits).
49 CFR US DOT.	49 CFR U.S. Department of Transportation.
ACGIH®.	American Conference of Governmental Industrial Hygienists.
ACGIH® 2022.	From ACGIH®, 2022 TLVs® and BEIs® Book. Copyright 2022. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement .
Acute Tox.	Acute toxicity.
ATE.	Acute Toxicity Estimate.
Cal/OSHA PEL.	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs).
Carc.	Carcinogenicity.
CAS.	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).
Ceiling-C.	Ceiling value.
DEP CODE.	Department of Environmental Protection Code.
DGR.	Dangerous Goods Regulations (see IATA/DGR).
DOT.	Department of Transportation (USA).
EC50.	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval.
EmS.	Emergency Schedule.
ErC50.	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control.
ERG No.	Emergency Response Guidebook - Number.
Eye Dam.	Seriously damaging to the eye.
Eye Irrit.	Irritant to the eye.
Flam. Liq.	Flammable liquid.
GHS.	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations.
HHS.	Higher hazard substance.
IARC.	International Agency for Research on Cancer.
IATA.	International Air Transport Association.
IATA/DGR.	Dangerous Goods Regulations (DGR) for the air transport (IATA).
ICAO.	International Civil Aviation Organization.
ICAO-TI.	Technical instructions for the safe transport of dangerous goods by air.
IMDG.	International Maritime Dangerous Goods Code.

Abbr.	Descriptions of used abbreviations.
IMDG-Code.	International Maritime Dangerous Goods Code.
LC50.	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval.
LHS.	Lower hazard substance.
MARPOL.	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant").
Met. Corr.	Substance or mixture corrosive to metals.
NFPA®.	National Fire Protection Association (United States).
NIOSH REL.	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs).
NPCA-HMIS® III.	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition.
OSHA.	Occupational Safety and Health Administration (United States).
PBT.	Persistent, Bioaccumulative and Toxic.
PEL.	Permissible exposure limit.
Ppm.	Parts per million.
Repr.	Reproductive toxicity.
RTECS.	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information).
Skin Corr.	Corrosive to skin.
Skin Irrit.	Irritant to skin.
STEL.	Short-term exposure limit.
STOT RE.	Specific target organ toxicity - repeated exposure.
TLV®.	Threshold Limit Values.
TWA.	Time-weighted average.
VPvB.	Very Persistent and very Bioaccumulative.

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code.	Text.
H227.	Combustible liquid.
H290.	May be corrosive to metals.
H302.	Harmful if swallowed.
H314.	Causes severe skin burns and eye damage.
H315.	Causes skin irritation.
H318.	Causes serious eye damage.
H319.	Causes serious eye irritation.
H332.	Harmful if inhaled.
H351.	Suspected of causing cancer.
H361f.	Suspected of damaging fertility.
H373.	May cause damage to organs through prolonged or repeated exposure.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. Date of compilation. 2022-10-02.