

grotamar 71

Article number: M0598

Version number: 7.1
Replaces version of: 2024-07-23 (6)

Revision: 2024-08-08

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name **grotamar 71**
Article number M0598
Authorisation number

National authorisation			
Country code	Number	Country	Identified uses
GB	n/a	United Kingdom	Product-type 6: Preservatives for products during storage

Unique formula identifier (UFI) VRA0-F020-S00A-HNNE

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

Relevant identified uses biocidal product
Oilfield production chemical
Uses advised against The product is not intended for consumer use.

1.3 Details of the supplier of the safety data sheet

Vink Chemicals GmbH & Co. KG
Eichenhöhe 29
21255 Kakenstorf
Germany

Telephone: +49 (0) 4186 - 88797 0
Telefax: +49 (0) 4186 - 88797 10
e-mail: sales@vink-chemicals.com
Website: https://vink-chemicals.com

Additional information

Importer				
Country	Name	Postal code/city	Telephone	e-Mail
United Kingdom	Vink Chemicals UK Ltd.	BN25 1NP Seaford		

e-mail (competent person) sds@vink-chemicals.com (Branko Ulaga)

1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
United Kingdom	National Poisons Information Service England	0844 892 0111

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (acc. to GB CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.1O	acute toxicity (oral)	4	Acute Tox. 4	H302
3.1D	acute toxicity (dermal)	3	Acute Tox. 3	H311
3.1I	acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.2	skin corrosion/irritation	1B	Skin Corr. 1B	H314
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.4S	skin sensitisation	1	Skin Sens. 1	H317
3.5	germ cell mutagenicity	2	Muta. 2	H341
3.6	carcinogenicity	1B	Carc. 1B	H350
3.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

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. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling (acc. to GB CLP)

- Signal word danger

- Pictograms

GHS05, GHS06,
GHS08, GHS09



- Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H373	May cause damage to organs (respiratory tract, gastrointestinal tract) through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

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- Precautionary statements

- P201 Obtain special instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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/...

- Supplemental hazard information

- EUH071 Corrosive to the respiratory tract.

- Hazardous ingredients for labelling

Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2).

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Remarks

The classification as a mutagen is mandatory. The maximum theoretical concentration of releasable formaldehyde, irrespective of the source, in the mixture as placed on the market is at least 1 %. The classification as a carcinogen is mandatory. The maximum theoretical concentration of releasable formaldehyde, irrespective of the source, in the mixture as placed on the market is at least 0,1 %.


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
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)	Index No 612-290-00-1	≥ 98	Acute Tox. 4 / H302 Acute Tox. 3 / H311 Acute Tox. 4 / H332 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317 Muta. 2 / H341 Carc. 1B / H350 STOT RE 2 / H373 Aquatic Chronic 2 / H411	

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)	-	-	630 mg/kg 760 mg/kg 11 mg/l/4h 2 mg/l/4h	oral dermal inhalation: vapour inhalation: dust/mist

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Remarks

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth. First aider: Pay attention to self-protection!.

Following inhalation

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

Following skin contact

Rinse skin with water/shower. Take off immediately all contaminated clothing. Immediately call a doctor. Gently wash with plenty of soap and water.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

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

Additional symptoms and effects are described in section 11 "Toxicological information".

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂),
Do not breathe gas/fumes/vapour/spray.
Inhaling hazardous decomposing products can cause serious health damage.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. 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. Ventilate affected area.

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For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

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. Take precautionary measures against static discharge. Use only in well-ventilated areas.

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

Control of effects

Protect against external exposure, such as
heat

Maintaining of the integrity of the substance or mixture

Store in a closed container.

- Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

- Packaging compatibilities

Keep only in original container. Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)
this information is not available

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. DIN EN 166.

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. 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.

- Type of material

IIR: isobutene-isoprene (butyl) rubber, Nitrile

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Other protection measures

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

Body protection

Chemical protection suit. DIN EN 13034.

Respiratory protection

During spraying wear suitable respiratory equipment. Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (EPA OPPTS OPPTS 830.6303) (EPA OPPTS OPPTS 830.6303)
Colour	light yellow - clear
Odour	characteristic
Melting point/freezing point	-60.5 °C at 1,013 hPa
Boiling point or initial boiling point and boiling range	146.8 °C (OECD Guideline 103)
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined

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Flash point	100.3 °C (EEC A 09)
Auto-ignition temperature	237 °C
Decomposition temperature	not relevant
pH (value)	10 – 11 (in aqueous solution: 1 % (w/w)) (CIPAC MT 75.3)
Kinematic viscosity	17.51 mm ² /s at 20 °C
Dynamic viscosity	18.72 mPa s at 20 °C (OECD Guideline 114)

Solubility(ies)

Water solubility	>1,000 g/l (CIPAC MT 157)
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Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	0.014 hPa at 25 °C
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Density and/or relative density

Density	1.05 – 1.07 g/cm ³ (OECD Guideline 109)
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
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Other safety characteristics

Miscibility	Completely miscible with water.
Refractive index	1.469 – 1.479
Liquid content	100 %
Solid content	0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

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10.2 Chemical stability

See below "Conditions to avoid".

To maintain the chemical stability:

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

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

Oxidisers, Reducing agents

10.6 Hazardous decomposition products

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 GHS

Acute toxicity

Harmful if swallowed. Toxic in contact with skin. Harmful if inhaled.

- Acute toxicity estimate (ATE)

Oral	630 mg/kg
Dermal	760 mg/kg
Inhalation: vapour	>11 mg/l/4h
Inhalation: dust/mist	2 mg/l/4h

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		oral	630 mg/kg
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		dermal	760 mg/kg
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		inhalation: vapour	11 mg/l/4h
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		inhalation: dust/mist	2 mg/l/4h

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

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 (respiratory tract, gastrointestinal tract) through prolonged or repeated exposure.

Hazard category	Target organ	Exposure route
2	respiratory tract	if exposed
2	gastrointestinal tract	if exposed

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Corrosive to the respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)			-0.043	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes

16 03 05* organic wastes containing hazardous substances

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

ADR/RID	UN 2922
IMDG-Code	UN 2922
ICAO-TI	UN 2922

14.2 UN proper shipping name

ADR/RID	CORROSIVE LIQUID, TOXIC, N.O.S.
IMDG-Code	CORROSIVE LIQUID, TOXIC, N.O.S.
ICAO-TI	Corrosive liquid, toxic, n.o.s.
Technical name (hazardous ingredients)	Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)

14.3 Transport hazard class(es)

ADR/RID	8 (6.1)
IMDG-Code	8 (6.1)
ICAO-TI	8 (6.1)

14.4 Packing group

ADR/RID	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations


Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

Classification code	CT1
Danger label(s)	8+6.1, fish and tree
	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 802(ADN)
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	86
Emergency Action Code	2X

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code	CT1
Danger label(s)	8+6.1, fish and tree
	
Environmental hazards	yes (hazardous to water)
Special provisions (SP)	274, 802(ADN)
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Hazard identification No	86

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (hazardous to the aquatic environment) (Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2))
Danger label(s)	8+6.1, fish and tree
	
Special provisions (SP)	274
Excepted quantities (EQ)	E2

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Limited quantities (LQ)	1 L
EmS	F-A, S-B
Stowage category	B

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

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	8+6.1



Special provisions (SP)	A3, A4
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant provisions of the European Union (EU)

Directive 94/33/EC on the protection of young people at work. Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work. Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
E2	environmental hazards (hazardous to the aquatic environment, cat. 2)	200 500	57)

Notation

57) hazardous to the Aquatic Environment in category Chronic 2

Deco-Paint Directive

VOC content	99 %
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Industrial Emissions Directive (IED)

VOC content	0 %
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Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

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Water Framework Directive (WFD)

List of pollutants (WFD)			
Name of substance	CAS No	Listed in	Remarks
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		a)	
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)		a)	

Legend

a) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Biocidal Products Regulation (BPR)

Biocidal active substances			
Name of substance	Wt%	W/w	Unit
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)	100 %	1,000	g/kg

Dose rate			
Instructions for use	Frequency of application	Dose rate	Unit
observe instructions for use	Dosage min.	0.05	g/kg
observe instructions for use	Dosage max.	0.8	g/kg

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

none of the ingredients are listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
grotamar 71	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
Formaldehyde released from the reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)	carcinogenic		28

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment has not been carried out.

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SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
3.2		Description of the mixture: change in the listing (table)	yes
9.1	Colour: colourless	Colour: light yellow - clear	yes
9.1	pH (value): 9.1 – 10.1 (in aqueous solution: 1 % (w/w)) (CIPAC MT 75.3)	pH (value): 10 – 11 (in aqueous solution: 1 % (w/w)) (CIPAC MT 75.3)	yes
9.1	Density: 1.049 – 1.069 g/cm ³ (OECD Guideline 109)	Density: 1.05 – 1.07 g/cm ³ (OECD Guideline 109)	yes
9.2	Liquid content: 99 %	Liquid content: 100 %	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association

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Abbr.	Descriptions of used abbreviations
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
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
log KOW	n-Octanol/water
Muta.	Germ cell mutagenicity
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended). The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended). GB mandatory classification and labelling.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). 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
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.

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Article number: M0598

Version number: 7.1
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Revision: 2024-08-08

Code	Text
H373	May cause damage to organs (respiratory tract, gastrointestinal tract) through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.