

Hraniclean 04

Issue date: 5/24/2017

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Revision date: 9/4/2025

Supersedes version of: 1/3/2024

Version: 2.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Hraniclean 04
UFI : 51S2-Y045-7009-M0ES

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

Relevant identified uses

Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Cleaner of hardened and uncured PUR adhesives in the wood industry
Function or use category : Other products for chemical or technical processes

Uses advised against

Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.3. Details of the supplier of the safety data sheet

Distributor

Hranipex Czech Republic k.s.
J. Rýznerové 97, Komorovice
CZ 396 01 Humpolec
Czech Republic
T +420 565 501 211

cz-hranipex@hranipex.com, www.hranipex.cz

E-mail address of competent person responsible for the SDS :
sds@regartis.com

Supplier

Hranipex Ltd.
Unit 2 Radial Park, Birmingham Business Park
Birmingham, B37 7YN
United Kingdom
T +44 121 767 9180, F 0121 782 6250

uk-hranipex@hranipex.com, www.hranipex.co.uk

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 2 H315

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Serious eye damage/eye irritation, Category 2H319

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects


Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS07

Signal word (CLP)

:

Warning

Contains

:

1-butylpyrrolidin-2-one

Hazard statements (CLP)

:

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP)

:

P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-butylpyrrolidin-2-one	CAS-No.: 3470-98-2 EC-No.: 222-437-8	> 50	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Glycerol	CAS-No.: 56-81-5 EC-No.: 200-289-5	< 27	Not classified
Propane-1,2-diol	CAS-No.: 57-55-6 EC-No.: 200-338-0	< 16	Not classified

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Take care of your own safety. If you experience any health problems or if you are in doubt, inform your doctor and provide him / her with information from this Safety Data Sheet. Life-threatening conditions require resuscitation. In case of unconsciousness place the affected person in a stabilized position on the side, with a slightly bowed head, and take care of the passage of the airways. Heart arrest - Immediately perform an indirect heart massage.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash skin with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	: Keep the affected person at rest. Do not induce vomiting. Seek medical advice immediately and show this container or label.
Self protection of the first-aiders	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Alcohol resistant foam. Dry powder. Carbon dioxide. Water spray. Water fog.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not flammable.
Hazardous decomposition products in case of fire	: On burning: release of carbon monoxide - carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3. Advice for firefighters

Firefighting instructions	: In case of fire: stop leak if safe to do so. Cool down the containers exposed to heat with a water spray. Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Prevent unauthorised access. Wear personal protective equipment. Avoid contact with skin and eyes.
For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.

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For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Protective goggles or face shield. Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow the mixture to enter into sewer, water system (underground water, surface water) or soil.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect all waste in suitable and labelled containers and dispose according to local legislation. Notify authorities if product enters sewers or public waters. Wash off with plenty of water. Do not use solvents.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep container tight closed. Avoid contact with skin and eyes. Wear personal protective equipment. Tampons or rags soaked with the mixture should be stored in tightly closed metal containers.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Tampons or rags soaked with the mixture should be stored in tightly closed metal containers. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep cool. Protect from sunlight. Keep in properly labelled containers.

Incompatible products : Strong acids, strong bases and strong oxidants.

Incompatible materials : PET, PVC packaging.

Storage temperature : 5 – 25 °C

Special rules on packaging : high density polyethylene (HDPE).

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Glycerol (56-81-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Glycerol
WEL TWA (OEL TWA)	10 mg/m³ mist
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Propane-1,2-diol (57-55-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Propane-1,2-diol

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Propane-1,2-diol (57-55-6)

WEL TWA (OEL TWA)	10 mg/m ³ particulates
	474 mg/m ³ total vapour and particulates
	150 ppm total vapour and particulates
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

DNEL and PNEC

1-butylpyrrolidin-2-one (3470-98-2)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	10 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	24.1 mg/m ³

PNEC (Sediment)

PNEC sediment (freshwater)	29.6 mg/kg dwt
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PNEC (STP)

PNEC sewage treatment plant	30.6 mg/l
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8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Provide adequate general and local exhaust ventilation. Apply technical measures to comply with the occupational exposure limits.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Eye and face protection

Eye protection:

Chemical goggles or face shield. (EN ISO 16321-1). Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure

Skin protection

Skin and body protection:

Wear suitable protective clothing. Protective shoes. Protective apron

Hand protection:

Standard EN 374 - Protective gloves against chemicals. Follow the glove manufacturer's specific recommendations when selecting the appropriate thickness, material, and permeability.

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Wear gloves according to EN374 resistant to the solvent(s) in use.	Ethylene-Propylene rubber (EPDM)	3 (> 60 minutes)	> 0.3 mm	x	EN ISO 374

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection

Device	Filter type	Condition	Standard
Mask	Type A - High-boiling (>65 °C) organic compounds	In case of insufficient ventilation, accident, fire, etc	x

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Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Immediately remove contaminated clothing or footwear. Wash contaminated clothing before reuse. Do not eat, drink or smoke in areas where product is used. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Transparent.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: < -75 °C (EINECS 222-437-8)
Boiling point	: 241 °C
Flammability	: Non flammable.
It does not have oxidising properties	: No chemical groups associated with oxidising properties present in the molecule.
Lower explosion limit	: 0.9 vol %
Upper explosion limit	: 8.7 vol %
Flash point	: 108 °C
Auto-ignition temperature	: 210 °C
Decomposition temperature	: Not available
pH	: substance/mixture is non-polar/aprotic
Viscosity, kinematic	: 4.479 mm ² /s
Viscosity, dynamic	: 4.3 mPa·s
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 1.256
Vapour pressure	: 8 Pa @ 20 °C
Vapour pressure at 50°C	: Not available
Density	: 0.96 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

Relative evaporation rate (butylacetate=1)	: 96 (DIN 53170)
VOC content	: 0.99 kg/kg
Refractive index	: 1.467
Total organic carbon (TOC)	: 0.63 kg/kg

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Strong acids, strong bases and strong oxidants.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. On burning: release of carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Glycerol (56-81-5)

LD50 oral rat	12600 mg/kg
LD50 dermal rabbit	> 10000 mg/kg

1-butylpyrrolidin-2-one (3470-98-2)

LD50 oral rat	300 – 2000 mg/kg Rattus norvegicus
LD50 dermal rat	> 2000 mg/kg Rattus norvegicus
LC50 Inhalation - Rat	> 5.1 mg/l Rattus norvegicus

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

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Viscosity, kinematic	4.479 mm²/s
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11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %
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SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

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Glycerol (56-81-5)

LC50 - Fish [1]	> 5000 mg/l <i>Carassius auratus</i>
EC50 - Other aquatic organisms [1]	> 10000 mg/l microorganisms
EC50 72h - Algae [1]	> 10000 mg/l <i>Scenedesmus subspicatus</i>

1-butylpyrrolidin-2-one (3470-98-2)

LC50 - Fish [1]	> 100 mg/l <i>Oncorhynchus mykiss</i>
EC50 - Crustacea [1]	100 mg/l <i>Daphnia magna</i>
EC50 72h - Algae [1]	> 160 mg/l <i>Pseudokirchneriella subcapitata</i>

12.2. Persistence and degradability

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Persistence and degradability	Product is biodegradable. When diluted multiple times with water, hydrolysis occurs.
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12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Pow)	1.256
Bioaccumulative potential	Bioaccumulation unlikely. Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

12.4. Mobility in soil

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Organic Carbon Normalized Adsorption Coefficient (Log Koc)	43.2
Ecology - soil	Low potential for adsorption in soil.

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.
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12.7. Other adverse effects

Other adverse effects	: No other effects known.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not dispose of waste into sewer. Do not remove as household garbage.

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Product/Packaging disposal recommendations

: Empty containers can be used in energy incinerator or stored in a landfill in accordance with the relevant legislation. May be reused following decontamination.

HP Code

: HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Hraniclean 04 ; 1-butylpyrrolidin-2-one	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 0.99 kg/kg

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP)

United Kingdom

British National Regulations : Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, in the valid wording.
Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, in the valid wording.
UK Waste Regulations.
UK REACH.
GB CLP.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
1.2	Restrictions on use	Added
1.2	Function or use category	Added
4	Self protection of the first-aider	Added
4.1	First-aid measures general	Modified
5.3	Other information	Added
7.1	Precautions for safe handling	Modified
7.2	Special rules on packaging	Added
8.2	Hand protection	Modified
8.2	Eye protection	Modified
8.2	Appropriate engineering controls	Modified
8.2	Other information	Modified
9	It does not have oxidising properties	Modified
9	Limiting impact energy	Removed
10.6	Hazardous decomposition products	Modified
12.2	Persistence and degradability	Modified
12.3	Bioaccumulative potential	Modified
12.4	Ecology - soil	Modified
12.7	Other adverse effects	Added

Abbreviations and acronyms:

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ATE	Acute Toxicity Estimate
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
LD50	Median lethal dose
LC50	Median lethal concentration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

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Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disruptor

Data sources

: ECHA Guidance on the compilation of safety data sheets
ECHA C&L Inventory database. Supplier's safety documents.

Training advice

: Provide SDS to employees. Follow general rules on handling chemical substances and/or mixtures.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Acute Tox. 4 (Oral)	H302	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Hraniclean 04

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
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