

Safety Data Sheet according to Regulation (EU) 2020/878 Issue date: 09/09/2021 Version: 1.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Stone Buster

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Use of the substance/mixture	: Cleaner

Title	Use descriptors
Professional Use (ES Ref.: ES-1)	SU20, SU23, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC10, PROC11, PROC13, PROC15, PROC19, ERC8a, ERC8b, ERC8e

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Emerald Clover Ltd. Drumduffy Drumkeeran N41 T998 Co. Leitrim - Ireland T +353-(0)71-96-48008 info@emeraldclover.ie - www.emeraldclover.ie

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity — Single exposure, Category 3, Respi	iratory H335
tract irritation	
Full text of H-statements: see section 16	

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.

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2.2. Label elements

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

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Hazard pictograms (CLP)

	GHS05 GHS07
Signal word (CLP)	: Danger
Contains	: hydrochloric acid 25-38%
Hazard statements (CLP)	: H290 - May be corrosive to metals.
	H314 - Causes severe skin burns and eye damage.
	H335 - May cause respiratory irritation.
Precautionary statements (CLP)	: P261 - Avoid breathing fume, gas, mist, spray, vapours.
	P280 - Wear protective gloves, protective clothing, 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 .
	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 or doctor.
	P405 - Store locked up.

2.3. Other hazards

The product does not meet the PBT and vPvB classification criteria

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrochloric acid substance with a Community workplace exposure limit (Note B)	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X	≥ 25 – < 40	Skin Corr. 1B, H314 STOT SE 3, H335
	(REACH-no) 01-2119484862-27		

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Hydrochloric acid	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X (REACH-no) 01-2119484862-27	(10 ≤C < 25) Skin Irrit. 2, H315 (10 ≤C < 25) Eye Irrit. 2, H319 (10 ≤C ≤ 100) STOT SE 3, H335 (25 ≤C ≤ 100) Skin Corr. 1B, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis. 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	: Never give anything by mouth to an unconscious person. Seek medical attention
	immediately. Call a physician immediately.
First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position
	comfortable for breathing. If experiencing respiratory symptoms: Call a POISON
	CENTER/doctor. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash
	immediately with plenty of water. Immediately call a POISON CENTER/doctor. Cover wounds with sterile bandage.
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. Call a physician immediately.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Rinse
	mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person.
4.2. Most important symptoms and effects	, both acute and delayed
Symptoms/effects	: May cause severe burns.
Symptoms/effects after inhalation	: Cough. Shortness of breath. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes severe burns. May produce skin irritation, blistering, ulcers, and deep scarring.
Symptoms/effects after eye contact	: Causes serious eye damage. May cause dermatitis, eye irritation, corneal oedema and chemical burns. Can cause blindness.
Symptoms/effects after ingestion	: Severe irritation or burns to the mouth, throat, oesophagus, and stomach. May perforate the oesophagus or the digestive tract. Blood in vomit.

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	: Water spray. Foam. Dry powder. Carbon dioxide. Use extinguishing agent suitable for surrounding fire.			
Unsuitable extinguishing media	: Do not use a heavy water stream.			
5.2. Special hazards arising from the subst	tance or mixture			
Fire hazard	: Burning produces irritating, toxic and noxious fumes.			
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Very flammable gas (hydrogen)may be formed on contact with metals.			
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide. hydrogen chloride.			
5.3. Advice for firefighters				
Precautionary measures fire	: Stop leak if safe to do so.			
Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection. Exercise caution when fighting any chemical fire. Fight fire with normal precautions from a reasonable distance. Move containers away from the fire area if this can be done without risk. Use water spray or fog for cooling exposed containers.			
Protection during firefighting	: Use self-contained breathing apparatus and chemically protective clothing. Wear fire/flame resistant/retardant clothing. EN 469. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.			

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid all contact with skin, eyes, or clothing. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
6.1.1. For non-emergency personnel	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Evacuate unnecessary personnel. Do not touch or walk on the spilled product. Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Avoid breathing (dust, vapor, mist, gas). Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up :	Take up liquid spill into absorbent material. Stop leaks if it can be done without personal risk. Dilute with water. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Absorb remaining liquid with sand or inert absorbent and remove to safe place.
Other information :	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and stora	ge	
7.1. Precautions for safe handling		
Precautions for safe handling	: Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Provide good ventilation in process area to prevent formation of vapour. Do not breathe spray, mist, vapours. Do not re-use container for any purpose. Empty containers retain product residue and can be hazardous. Do not mix with other chemicals. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.	
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Keep away from food, drink and animal feedingstuffs.	
7.2. Conditions for safe storage, in	cluding any incompatibilities	
Storage conditions	: Keep away from food, drink and animal feedingstuffs. Store in original container or corrosive	

d/or lined container. Keep container tightly closed. Containers which are opened roperly resealed and kept upright to prevent leakage. Store away from other
o not store in unlabelled containers. Store in a well-ventilated place. Keep cool.
rosive resistant container with a resistant inner liner.
s. Light metals. alcohols. halogenated hydrocarbons.
ght. Heat sources. Metals.
, cool, well-ventilated area.
packaging materials: aluminium, zinc, copper.
nloride. Polyethylene. polypropylene.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Stone Buster	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Hydrogen chloride
IOEL TWA [ppm]	5 ppm
IOEL STEL	15 mg/m³
IOEL STEL [ppm]	10 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

Hydrochloric acid (7647-01-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Hydrogen chloride	
IOEL TWA [ppm]	5 ppm	
IOEL STEL	15 mg/m ³	
IOEL STEL [ppm]	10 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Ireland - Occupational Exposure Limits		
Local name	Hydrogen chloride	
OEL TWA [1]	8 mg/m ³	
OEL TWA [2]	5 ppm	
OEL STEL	15 mg/m ³	
OEL STEL [ppm]	10 ppm	
Notes (IE)	IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2021	

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. Refer to all applicable national, international and local regulations or provisions.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Handle in accordance with good industrial hygiene and safety procedures.

8.2.2. Personal protection equipment

Personal protective equipment:

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or face shield. Safety glasses. EN 166. Do not wear contact lenses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. Impermeable boots and protective equipment. EN 943. Skin protection appropriate to the conditions of use should be provided

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Polychloroprene. Butyl rubber. Polyvinylchloride (PVC). Breakthrough time: 6 (> 480 minutes). Thickness 0.5 mm. Nitrile rubber gloves. Breakthrough time: 6 (> 480 minutes). Thickness 0.35 mm. Fluorinated rubber. Breakthrough time: 6 (> 480 minutes). Thickness 0.4 mm

Other skin protection

Materials for protective clothing:

PPE compliant to the recommended EN/ISO standards should be selected.

8.2.2.3. Respiratory protection

Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. EN141. Combination filter:B-P2

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Prevent entry to sewers and public waters. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Pungent.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -42 °C 32% solution, -29 °C37% solution
Boiling point	: -80 °C 32% solution, 45°C 37% solution

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Flammability	: Not applicable
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: <1 (20 °C)
Viscosity, kinematic	: Not available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 30 hPa(a) (20 °C) 32% solution, 200 hPa(20 °C) 37% solution
Vapour pressure at 50 °C	: Not available
Density	: 1.15 g/cm ³ (20°C) 30% solution, 1.17 g/cm3 (20°C) 35% solution, 1.18 g/cm3 (20°C) 37%
	solution
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Very flammable gas (hydrogen)may be formed on contact with metals. May be corrosive to metals.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Exothermic reaction on contact with : water. Strong bases. Hazardous polymerisation: Will not occur.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong bases. Organic materials. alcohols. Hydrocarbons, halogenated. metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)

: Not classified (Based on available data, the classification criteria are not met)

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Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not me	et)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not me	et)

Hydrochloric acid (7647-01-0)	
LD50 oral rat	2222 mg/kg
LD50 dermal rabbit	5010 mg/kg
LC50 Inhalation - Rat	45.6 mg/l
Skin corrosion/irritation	: Causes severe skin burns. pH: < 1 (20 °C)
Serious eye damage/irritation	: Causes serious eye damage. pH: < 1 (20 °C)
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	 Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)

Hydrochloric acid (7647-01-0)	
IARC group	3 - Not classifiable
Reproductive toxicity :	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure :	May cause respiratory irritation.

Hydrochloric acid (7647-01-0)	
STOT-single exposure	May cause respiratory irritation.
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)
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.	
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	: Not classified (Based on available data, the classification criteria are not met)	
(chronic)		
Not rapidly degradable		

Additional information

: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

Hydrochloric acid (7647-01-0)	
LC50 - Fish [1]	20.5 mg/l (Lepomis macrochirus; 24 h)
EC50 - Crustacea [1]	0.45 mg/l (Daphnia magna; 48 h) (OECD Test Guideline 202)
EC50 72h - Algae [1]	0.73 mg/l (Chlorella vulgaris (Fresh water algae); 72 h) (End point: Growth rate; OECD Test Guideline 201)

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12.2. Persistence and degradability

Stone Buster	
Persistence and degradability Inorganic product which cannot be eliminated from water by biological purification	
	processes.

12.3. Bioaccumulative potential

Stone Buster	
Bioaccumulative potential	No bioaccumulation potential.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Stone Buster
The product does not meet the PBT and vPvB classification criteria
12.6. Endearing discutting properties

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects: May cause pH changes in aqueous ecological systemsAdditional information: Avoid release to the environment.

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal via incineration is recommended. Neutralisation is necessary before draining of to the purification plant. Disposal must be carried out using appropriate EWC code.	
Sewage disposal recommendations	: Do not dispose of waste into sewer. Disposal must be done according to official regulations.	
Additional information	: Do not re-use empty containers.	
Ecology - waste materials	: Avoid release to the environment.	

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
ABR	IMEG			
14.1. UN number or ID n	umber			
UN 1789	UN 1789	UN 1789	UN 1789	UN 1789
14.2. UN proper shippin	g name			
HYDROCHLORIC ACID	HYDROCHLORIC ACID (2-	Hydrochloric acid (2-	HYDROCHLORIC ACID (2-	HYDROCHLORIC ACID (2-
	aminoethanol)	aminoethanol)	aminoethanol)	aminoethanol)
Transport document description				
UN 1789 HYDROCHLORIC	UN 1789 HYDROCHLORIC	UN 1789 Hydrochloric acid	UN 1789 HYDROCHLORIC	UN 1789 HYDROCHLORIC
ACID, 8, II, (E)	ACID (2-aminoethanol), 8,	(2-aminoethanol), 8, II	ACID (2-aminoethanol), 8,	ACID (2-aminoethanol), 8,
	Ш		П	II
14.3. Transport hazard class(es)				
8	8	8	8	8

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B	B	B	B	B
14.4. Packing group	· ·			
II	II	II	II	II
14.5. Environmental haz	zards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special precautions for user

Overland transport	
Classification code (ADR)	: C1
Special provisions (ADR)	: 520
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T8
	: TP2
(ADR)	
Tank code (ADR)	: L4BN
Tank special provisions (ADR)	: TU42
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Hazard identification number (Kemler No.)	: 80
Orange plates	80 1789
Tunnel restriction code (ADR)	: E
Transport by sea	
Limited quantities (IMDG)	: 1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
IBC special provisions (IMDG)	: B20
Tank instructions (IMDG)	: T8
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: C
Segregation (IMDG)	: SGG1A, SG36, SG49
Properties and observations (IMDG)	: Colourless liquid.An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.
Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO may not quantity (IATA)	. 20

ERG code (IATA)

CAO max net quantity (IATA) Special provisions (IATA) : 30L

: A3 : 8L

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Inland waterway transport
Ole 'f' t' I - (ADNI)

Classification code (ADN)	: C1
Special provisions (ADN)	: 520
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C1
Special provisions (RID)	: 520
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T8
Portable tank and bulk container special provisions	: TP2
(RID)	
Tank codes for RID tanks (RID)	: L4BN
Special provisions for RID tanks (RID)	: TU42
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

	The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:			
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,	Reference code	Applicable on Entry title or description		
	3(b)	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,		

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
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

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ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class
BCF	Bioconcentration factor
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
IARC	International Agency for Research on Cancer
OECD	Organisation for Economic Co-operation and Development
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
N.O.S.	Not Otherwise Specified
ED	Endocrine disrupting properties
Data sources Training advice	 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Supplier's safety documents. Training staff on good practice.

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Other information

: SDS prepared by. H2 Compliance.

Full text of H- and EUH-statements:		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Met. Corr. 1	Corrosive to metals, Category 1	
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H290	May be corrosive to metals.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	

Full text of use descripto	rs
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent
PROC19	Manual activities involving hand contact
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
SU20	Health services
SU23	Electricity, steam, gas water supply and sewage treatment

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	Weight of evidence
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method
STOT SE 3	H335	

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Safety Data Sheet

according to Regulation (EU) 2020/878

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.

Safety Data Sheet

according to Regulation (EU) 2020/878

Annex to the safety data sheet

Identified Uses	Es N°	Short title	Page
Professional Use	1	Professional Use	16

Annex to the safety data sheet: Exposure scenario Product form: Mixture Physical state: Liquid

1. ES-1 - Professional Use			
1.1. Title section			
	Professional Use		
	ES Ref.: ES-1 ES Type: Worker		
Environment		Use descriptors	
	Contributing scenario controlling environmental exposure	ERC8a, ERC8b, ERC8e	

Worker		Use descriptors
	exposure	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC10, PROC11, PROC13, PROC15, PROC19

1.2. Conditions of use affecting exposure

1.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC8a, ERC8b, ERC8e)

ERC8a	Nidespread use of non-reactive processing aid (no inclusion into or onto article, indoor)	
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)	
ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)	

Amount used, frequency and duration of use (or from service life)		
Continuous release	360 days/yr	

Technical and organisational conditions and measures	
Ensure all waste water is collected and treated via a WWTP, All contaminated waste water must be processed in an industrial or municipal wastewater treatment plant that incorporates both primary and secondary treatments.	
Prevent leaks and prevent soil / water pollution caused by leaks	

1.2.2. Control of worker exposure: Contributing scenario controlling worker exposure (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC10, PROC11, PROC13, PROC15, PROC19)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent
PROC19	Manual activities involving hand contact

Annex to the safety data sheet: Exposure scenario Product form: Mixture Physical state: Liquid

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 40 %	
Vapour pressure	Liquid, vapour pressure 0.5 - 10 kPa at Standard Temperature and Pressure	

Amount used (or contained in articles), frequency and duration of use/exposure		
Varies between milliliters (sampling) and cubic meters (material transfers)		
Covers daily exposures up to 8 hours	5 days/week	
Avoid carrying out operation for more than 15 minutes	(without respiratory protection PROC11, PROC19)	
Avoid carrying out operation for more than 1 hour	(Without Local Exhaustt Ventilation PROC15)	
Avoid carrying out operation for more than 4 hours	(PROC 15)	

Technical and organisational conditions and measures

Conditions and measures related to personal protection, hygiene and health evaluation	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear chemically resistant gloves. Wear suitable gloves tested to EN374.(PROC3, PROC10, PROC11 PROC13, PROC19) Wear a half face respirator conforming to EN140 Type A filter or better (PROC11, PROC19) Do not carry out the operation for more than 15 min. without respiratory protection (PROC11, PROC19) Wear suitable gloves tested to EN374. (PROC3) Wear a respirator conforming to EN140 transition (PROC3) Wear a respirator conforming to EN140 with Type A filter or better.	

1.3. Exposure estimation and reference to its source

1.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC8a, ERC8b, ERC8e)

Information for contributing exposure scenario

No exposure assessment presented for the environment, Substance will dissociate upon contact with water, the only effect is the pH effect, therefore after passing through the sewage treatment plant exposure is considered negligible and with no risk.

1.3.2. Worker exposure Contributing scenario controlling worker exposure (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC10, PROC11, PROC13, PROC15, PROC19)

Information for contributing exposure scenario

Risk Management Measures are based on qualitative risk characterisation

Annex to the safety data sheet: Exposure scenario Product form: Mixture Physical state: Liquid

Route of exposure and type of effects	Exposure estimate	RCR	Method
Long term - Local - Inhalation	7.5 mg/m³	0.9	PROC8a, PROC10, PROC13, PROC11, PROC19

1.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

1.4.1. Environment

No data available

1.4.2. Health

Guidance - Health	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information on the assessment method, see: http://www.ecetoc.org/traOnly properly trained persons shall make use of scaling methods while checking whether the OC and RMM are within the boundaries set by the ES
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