

#### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 21/07/2022 Revision date: 21/07/2022 Supersedes version of: 08/03/2016 Version: 3.0

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

#### 1.1. Product identifier

Product form : Mixture

Trade name : RIPOFLUX : Flux paste for silver and phosphorus-copper brazing

Product code : 528400
Product group : Trade product

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

#### 1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : Flux paste for brazing GAS pipes

Use of the substance/mixture : Welding and soldering products, flux products

Function or use category : Welding and soldering agents

1.2.2. Uses advised against

Restrictions on use : Avoid aluminium

#### 1.3. Details of the supplier of the safety data sheet

**VIRAX SAS** 

39, quai Marne - CS 40197 FR- 51206 EPERNAY Cedex

T +33 (0)3 26 59 56 56 - F +33 (0)3 26 59 56 60

hse@virax.com

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS 111/NHS 24/NHS Direct		111	or call a doctor
			0845 4647	

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1A H314
Serious eye damage/eye irritation, Category 1 H318

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

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Causes serious eye damage. May cause long lasting harmful effects to aquatic life.

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Contains : potassium hydroxide; caustic potash

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P102 - Keep out of reach of children.

P260 - Do not breathe mist, fume, dust, vapours.

#### Safety Data Sheet

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

P264 - Wash hands, forearms and face thoroughly after handling.

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 or shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER, a doctor. P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

Child-resistant fastening : Applicable Tactile warning : Applicable

#### 2.3. Other hazards

Other hazards which do not result in classification : inhalation exposure. Inhalation of fumes may cause metal fume fever.

PBT: not yet assessed vPvB: not yet assessed

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH 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 is 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**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium tetrafluoroborate	CAS-No.: 14075-53-7 EC-No.: 237-928-2 REACH-no: 01- 2119968922-24	> 40 - < 60	Not classified
potassium hydroxide; caustic potash	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01- 2119487136-33	> 5 - < 25	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=333 mg/kg bodyweight) Skin Corr. 1A, H314

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
potassium hydroxide; caustic potash	CAS-No.: 1310-58-3	( 0,5 ≤C < 2) Eye Irrit. 2, H319	
	EC-No.: 215-181-3	( 0,5 ≤C < 2) Skin Irrit. 2, H315	
	EC Index-No.: 019-002-00-8	( 2 ≤C < 5) Skin Corr. 1B, H314	
	REACH-no: 01-	( 5 ≤C ≤ 100) Skin Corr. 1A, H314	
	2119487136-33		

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

#### Safety Data Sheet

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

#### **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. If you feel unwell, seek medical

advice (show the label where possible). Work outside or in a well-ventilated room. Call a

physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest. Place under medical observation.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get immediate medical advice/attention. Rinse immediately

contaminated clothing and skin with plenty of water before removing clothes. Take off immediately all contaminated clothing. Call a physician immediately. Wash skin with plenty

of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Consult an eye specialist. Remove contact

lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label. Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Do not

induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burn

#### 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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Not combustible.

Hazardous decomposition products in case of fire : Hazardous gas/vapours are formed in the event of decomposition (see section 10).

Hydrofluoric Acid. Mark out the danger area with appropriate signs. Only qualified personnel

equipped with suitable protective equipment may intervene.

#### 5.3. Advice for firefighters

Precautionary measures fire : on exposure to water (moisture). Beware of formation of hydrofluoric acid.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Other information : Extra personal protection: complete protective clothing including self-contained breathing

apparatus.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Collect leaking liquid in sealable containers. Do not discharge into drains or the

environment.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

Do not breathe fume, mist, dust, vapours.

#### Safety Data Sheet

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

#### 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. Self-contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".

**Emergency procedures** 

: Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: The potassium salts contained in the fluxes are dissolved to 99.99% by washing in a very hot alkaline solution used in baths (regularly drained). Dilute thoroughly with water. Collect the liquids with an absorbent material. Dispose of contaminated material as waste (see chapter 13). On land, sweep or shovel into suitable containers. Store away from other materials.

Other information

: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

Exposure controls and personal protection. Refer to protective measures listed in Sections 7 and 8. For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide good ventilation in process area to prevent formation of vapour. Do not breathe vapours. Provide for appropriate exhaust ventilation at places of vapours accumulation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Avoid contact with the skin and the eyes. Do not eat, drink or smoke when using this product. Never mix with other materials. Wash all protective clothing after use. Always keep in containers made of the same material as the supply container. Container remains hazardous when empty. Continue to observe all precautions. Do not wear contact lenses. Keep away from (strong) bases. and with (strong) oxidizers. Avoid contact with skin and eyes. Do not breathe mist, fume, dust, vapours. Wear personal protective equipment.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures Storage conditions

Incompatible materials

Storage temperature

Maximum storage period

: Provide local exhaust or general room ventilation. Comply with applicable regulations. Keep container closed when not in use. Keep locked up and out of the reach of children. Keep only in original container. Keep away from open flames, hot surfaces and sources of

ignition. The floor of the depot should be impermeable and designed to form a water-tight basin. Keep away from living quarters. Keep away from food, drink and animal

feedingstuffs. Store in a clean, dry, fire resistant area. Store tightly closed in a dry, cool and well-ventilated place. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases, Strong oxidizers,

: Sources of ignition. Direct sunlight. Heat sources. Alkaline mixture.

: < 24 months

: Install a retention tank. Store in a well-ventilated place. Store away from heat. Storage area

Special rules on packaging : Keep only in original container. Store in a closed container.

Packaging materials : Polyethylene.

#### 7.3. Specific end use(s)

See Section 1.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

21/07/2022 (Revision date) EN (English) 4/13

#### Safety Data Sheet

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

potassium hydroxide; caustic potash (1310-58-3)		
United Kingdom - Occupational Exposure Limits		
Local name	Potassium hydroxide	
WEL STEL (OEL STEL)	2 mg/m³	
Regulatory reference EH40/2005 (Fourth edition, 2020). HSE		

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 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

#### 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. The usual precautionary measures are to be adhered to when handling chemicals.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Personal protective equipment symbol(s):









#### 8.2.2.1. Eye and face protection

#### Eye protection:

Wear goggles with suitable filter lenses when use is cutting/welding. Do not wear contact lenses. Welding mask. Safety glasses with side shields

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Time of penetration is to be checked with the glove producer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Butyl rubber gloves. VITON gloves. Nitrile rubber gloves

Hand protection	nd protection				
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Viton® II, Butyl rubber	6 (> 480 minutes)	0.70 mm		EN ISO 374
Protective gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0.20 mm		EN ISO 374

#### Other skin protection

#### Materials for protective clothing:

Wear suitable protective clothing

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Wear appropriate mask. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe gas, fumes, vapour or spray. Ensure good ventilation of the work station. Use a receptor hood for fumes/vapours

#### Safety Data Sheet

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

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### Other information:

Keep away from food, drink and animal feedingstuffs. Avoid contact with skin and eyes. Avoid inhalation of vapours. Do not eat, drink or smoke during use. Always wash hands after handling the product.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : white.
Appearance : Pasty.
Odour : characteristic.
Odour threshold : Not available

Melting point : 185 - 550 °C (values of the constituents of the preparation)

Freezing point : Not applicable
Boiling point : 450 – 600 °C

Flammability : The product is not easily ignited

Non flammable.

Explosive properties : Product is not explosive.

**Explosive limits** : Not applicable Lower explosion limit : Not applicable Upper explosion limit : Not applicable Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available : Not available pΗ pH solution : Not available Viscosity, kinematic : Not applicable

Solubility : In water, material is partially soluble. Insoluble in organic solvents.

Organic solvent:Insoluble

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : 23 hPa at 20 °C Vapour pressure at 50 °C : Not available

Density : 0,8 – 1,6 g/cm³ at 20 °C

Not applicable Relative density Relative vapour density at 20 °C Not applicable Particle size Not available Particle size distribution : Not available Particle shape : Not available Particle aspect ratio : Not available Particle aggregation state : Not available Particle agglomeration state : Not available Particle specific surface area Not available Particle dustiness : Not available

#### 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

21/07/2022 (Revision date) EN (English) 6/13

#### Safety Data Sheet

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

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

May release hazardous fumes. Hazardous decomposition products.

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Do not breathe fumes from fires or vapours from decomposition. Heat. Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Oxidizing agent. Strong bases. Metallic oxides.

#### 10.6. Hazardous decomposition products

fume. potassium hydroxide, caustic potash. Hydrofluoric Acid.

#### **SECTION 11: Toxicological information**

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

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

Potassium tetrafluoroborate (14075-53-7)		
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401 method)	
LC50 Inhalation - Rat (Dust/Mist)	> 5300 mg/l/4h (OECD 436 method)	
potassium hydroxide; caustic potash (1310-58-3)		
LD50 oral rat 333 mg/kg bodyweight		

Skin corrosion/irritation : Causes severe skin burns. Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met) : Not classified (Based on available data, the classification criteria are not met) 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) Reproductive toxicity 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) Not classified (Based on available data, the classification criteria are not met) Aspiration hazard

RIPOFLUX : Flux paste for silver and phosphorus-copper brazing		
Viscosity, kinematic	Not applicable	

#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

: Harmful if swallowed, Irritation: severely irritant to eyes

symptoms

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term (chronic)

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

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

21/07/2022 (Revision date) EN (English) 7/13

#### Safety Data Sheet

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

Potassium tetrafluoroborate (14075-53-7)		
LC50 - Fish [1]	760 mg/l (OECD 203 method)	
EC50 - Crustacea [1]	> 100 mg/l (OECD 202 method)	
ErC50 algae	> 100 mg/l	
NOEC chronic crustacea	188 mg/l	
NOEC chronic algae	100 mg/l	

#### 12.2. Persistence and degradability

RIPOFLUX : Flux paste for silver and phosphorus-copper brazing		
Persistence and degradability	Not established.	

#### 12.3. Bioaccumulative potential

RIPOFLUX : Flux paste for silver and phosphorus-copper brazing		
Bioaccumulative potential	Not established.	

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

RIPOFLUX : Flux paste for silver and phosphorus-copper brazing	
	PBT: not yet assessed
	vPvB: not yet assessed

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Empty the packaging completely prior to disposal.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 16 03 03\* - inorganic wastes containing dangerous substances

12 01 13 - welding wastes

15 02 02\* - absorbents, filter materials (including oil filters not otherwise specified), wiping

cloths, protective clothing contaminated by dangerous substances

15 01 02 - plastic packaging

HP Code : HP8 - "Corrosive:" waste which on application can cause skin corrosion.

#### **SECTION 14: Transport information**

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID i				
UN 1814	UN 1814	UN 1814	UN 1814	UN 1814
14.2. UN proper shippir	ng name			
POTASSIUM	POTASSIUM	Potassium hydroxide	POTASSIUM	POTASSIUM
HYDROXIDE SOLUTION	HYDROXIDE SOLUTION	solution (CONTAINS;	HYDROXIDE SOLUTION	HYDROXIDE SOLUTION
(CONTAINS ; potassium (CONTAINS ; potass		potassium hydroxide;	(CONTAINS ; potassium	(CONTAINS; potassium
hydroxide; caustic potash)	hydroxide; caustic potash)	caustic potash)	hydroxide; caustic potash)	hydroxide; caustic potash)

#### Safety Data Sheet

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

Towns and the second the socialism				
Transport document description				
UN 1814 POTASSIUM	UN 1814 POTASSIUM	UN 1814 Potassium	UN 1814 POTASSIUM	UN 1814 POTASSIUM
HYDROXIDE SOLUTION	HYDROXIDE SOLUTION	hydroxide solution	HYDROXIDE SOLUTION	HYDROXIDE SOLUTION
(CONTAINS ; potassium	(CONTAINS ; potassium	(CONTAINS; potassium	(CONTAINS; potassium	(CONTAINS ; potassium
hydroxide; caustic	hydroxide; caustic	hydroxide; caustic	hydroxide; caustic	hydroxide; caustic
potash), 8, III, (E)	potash), 8, III	potash), 8, III	potash), 8, III	potash), 8, III
14.3. Transport hazard class(es)				
8	8	8	8	8
8	8	3	8	8
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment: No	environment: No	environment: No	environment: No	environment: No
	Marine pollutant: No			
No supplementary information	on available		•	•

#### 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : C5
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1

(ADR)

Tank code (ADR) : L4BN
Tank special provisions (ADR) : TU42
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80

Orange plates : 80

Tunnel restriction code (ADR) : E EAC code : 2R

#### Transport by sea

Special provisions (IMDG) : 223 : 5 L Limited quantities (IMDG) Excepted quantities (IMDG) : E1 : P001, LP01 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) T4 Tank special provisions (IMDG) TP1 : F-A EmS-No. (Fire) : S-B EmS-No. (Spillage) Stowage category (IMDG) : A Segregation (IMDG) SG35

Properties and observations (IMDG) : Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Reacts with

ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous

membranes. Reacts violently with acids.

Air transport

PCA Excepted quantities (IATA) : E1

#### Safety Data Sheet

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

PCA Limited quantities (IATA) : Y841 PCA limited quantity max net quantity (IATA) : 11 PCA packing instructions (IATA) 852 PCA max net quantity (IATA) 5L CAO packing instructions (IATA) : 856 CAO max net quantity (IATA) 601 : A3, A803 Special provisions (IATA) ERG code (IATA) : 8L

#### Inland waterway transport

Classification code (ADN) : C5
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

#### Rail transport

Classification code (RID) : C5
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1

(RID)

Tank codes for RID tanks (RID) : L4BN Special provisions for RID tanks (RID) : TU42 Transport category (RID) : 3 Special provisions for carriage – Packages (RID) : W12 Colis express (express parcels) (RID) : CE8 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

Contains no REACH substances with Annex XVII restrictions

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

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

#### Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not relevant

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

#### 15.1.2. National regulations

Ensure all national/local regulations are observed

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### Safety Data Sheet

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

#### **SECTION 16: Other information**

Indication of changes				
Section	Changed item	Change	Comments	
1.1	Trade name	Modified		
1.1	Name	Name Added		
1.2	Use of the substance/mixture	Modified		
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified		
2.2	Precautionary statements (CLP)	Modified		
2.2	Hazard statements (CLP)	Modified		
3	Composition/information on ingredients	Modified		
4.1	First-aid measures after ingestion	Modified		
4.1	First-aid measures after eye contact	Modified		
5.3	EAC code	Modified		
6.3	Methods for cleaning up	Modified		
6.4	Reference to other sections (8, 13)	Modified		
8.2	Eye protection	Modified		
9.1	Solubility in organic solvents	Modified		
9.1	Vapour pressure	Modified		
9.1	Density	Modified		
9.1	Flammability (solid, gas)	Modified		
9.1	Melting point	Modified		
9.1	Explosive properties	Modified		
10.6	Hazardous decomposition products	Modified		
11.1	Reason for no classification	Added		
13.1	European List of Waste (LoW) code	Modified		
13.1	H code	Added		
14.1	UN-No. (ADR)	Modified		
14.1	UN-No. (ADN)	Modified		
14.1	UN-No. (IATA)	Modified		
14.1	UN-No. (IMDG)	Modified		
14.2	Proper Shipping Name (ADR)	Modified		
14.4	Packing group (ADR)	Modified		
14.4	Packing group (ADN)	Modified		
14.4	Packing group (IATA)	Modified		
14.4	Packing group (IMDG)	Modified		
14.6	Classification code (ADR)	Modified		
14.6	Hazard identification number (Kemler No.)	Modified		
14.6	Limited quantities (ADR)	Modified		
14.6	Excepted quantities (ADR)	Modified		
14.6	Packing instructions (IMDG)	Modified		
14.6	Transport category (ADR)	Modified		
16	Abbreviations and acronyms	Modified		
16	Data sources	Modified		
10	Data Soulces	woulled		

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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
IARC	International Agency for Research on Cancer	
LC50	Median lethal concentration	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
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	
SDS	Safety Data Sheet	

#### Safety Data Sheet

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

IATA	International Air Transport Association		
IMDG	·		
LD50	International Maritime Dangerous Goods  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		
OECD	Organisation for Economic Co-operation and Development		
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		
STP	Sewage treatment plant		
TLM	Median Tolerance Limit		
vPvB	Very Persistent and Very Bioaccumulative		
VOC	Volatile Organic Compounds		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
ThOD	Theoretical oxygen demand (ThOD)		
ED	Endocrine disrupting properties		
EN	European Standard		
N.O.S.	Not Otherwise Specified		
CAS-No.	Chemical Abstract Service number		
EC-No.	European Community number		
TRGS	Technical Rules for Hazardous Substances		
BLV	Biological limit value		
OEL	Occupational Exposure Limit		
IOELV	Indicative Occupational Exposure Limit Value		
WGK	Water Hazard Class		

Data sources

Training advice

Other information

: 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 . 17 ATP Inserted / Updated.

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

: Ensure all national/local regulations are observed. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H290	May be corrosive to metals.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
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	

### Safety Data Sheet

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008		
[CLP]:		
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method

Safety Data Sheet (SDS), EU

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.