



# SAFETY DATA SHEET

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

### 1.1. Product identifier

Trade name or designation of the mixture EVAPO-RUST

Registration number -

Synonyms None.

Product code BDS002697BU

Issue date 06-April-2022

Version number 1.0

Revision date 06-April-2022

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

Identified uses Scale and rust remover

Uses advised against None known.

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

Company name CRC Industries Europe bv

Address Touwslagerstraat 1

9240 Zele

Belgium

Telephone +32(0)52/45.60.11

Fax +32(0)52/45.00.34

E-mail hse@crcind.com

Website www.crcind.com

1.4. Emergency telephone number Tel.: +32(0)52/45.60.11 (office hours: 9-17h CET)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

#### Precautionary statements

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Supplemental label information EUH210 - Safety data sheet available on request.

### 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### Mixture

## General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Salt of an Organic Acid	<5	Confidential	Confidential	-	
<b>Classification:</b> Acute Tox. 4;H302, Eye Irrit. 2;H319					
Organic acid	<3	Confidential	Confidential	-	
<b>Classification:</b> Eye Irrit. 2;H319, STOT SE 3;H335					

## List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#: This substance has been assigned Union workplace exposure limit(s).

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** Exposure may cause temporary irritation, redness, or discomfort.

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

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** Wear appropriate personal protective equipment.

**For emergency responders** Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**6.4. Reference to other sections**

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Avoid prolonged exposure. Observe good industrial hygiene practices.

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

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).  
Storage class (TRGS 510): 12 (Non-combustible liquids that cannot be assigned to any of the above storage classes)

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

Not available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

No exposure limits noted for ingredient(s).

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no effect levels (DNELs)****General Population**

Components	Value	Assessment factor	Notes
2-[bis(2-hydroxyethyl)amino]ethanol (CAS 102-71-6)			
Long-term, Local, Inhalation	0.4 mg/m <sup>3</sup>	36	Repeated dose toxicity
Long-term, Systemic, Dermal	2.66 mg/kg	100	Repeated dose toxicity
Salt of an Organic Acid (CAS Confidential)			
Long-term, Local, Inhalation	10 mg/m <sup>3</sup>		irritation respiratory tract
Long-term, Systemic, Dermal	24 mg/kg	20	Repeated dose toxicity

**Workers**

Components	Value	Assessment factor	Notes
2-[bis(2-hydroxyethyl)amino]ethanol (CAS 102-71-6)			
Long-term, Local, Inhalation	1 mg/m <sup>3</sup>		Repeated dose toxicity
Long-term, Systemic, Dermal	7.5 mg/kg	50	Repeated dose toxicity
Salt of an Organic Acid (CAS Confidential)			
Long-term, Local, Inhalation	10 mg/m <sup>3</sup>		irritation respiratory tract
Long-term, Systemic, Dermal	48 mg/kg	10	Repeated dose toxicity

**Predicted no effect concentrations (PNECs)**

Components	Value	Assessment factor	Notes
2-[bis(2-hydroxyethyl)amino]ethanol (CAS 102-71-6)			
Freshwater	0.32 mg/l	50	
Sediment (freshwater)	1.7 mg/kg		
Soil	0.151 mg/kg		
STP	10 mg/l	100	
Salt of an Organic Acid (CAS Confidential)			
Freshwater	0.096 mg/l	100	
Secondary poisoning	5.3 mg/kg	90	Oral
Sediment (freshwater)	193 mg/kg		
Soil	14 mg/kg	50	
STP	58 mg/l	5	

**8.2. Exposure controls****Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****General information**

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

**Eye/face protection**

Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.

**Skin protection****- Hand protection**

For incidental contact with the product wear chemical-resistant gloves (standard EN 374). The use of disposable gloves is acceptable provided that they are changed immediately after a splash or spill. Neoprene gloves are recommended.

**- Other**

Wear suitable protective clothing.

<b>Respiratory protection</b>	Not necessary in normal use. Wear approved respirator if exposure likely to exceed MEL/OES.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Not available.
<b>Colour</b>	Colourless to yellow.
<b>Odour</b>	Neutral.
<b>Odour threshold</b>	Not available.
<b>pH</b>	5.5
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	> 100 °C (> 212 °F)
<b>Flash point</b>	179.0 °C (354.2 °F) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	0.00001 hPa estimated
<b>Vapour density</b>	Not available.
<b>Relative density</b>	1.1 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	324 °C (615.2 °F) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

**9.2. Other information** No relevant additional information available.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Not available.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.

<b>Eye contact</b>	Based on available data, the classification criteria are not met.
<b>Skin contact</b>	Based on available data, the classification criteria are not met.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms</b>	Exposure may cause temporary irritation, redness, or discomfort.

### 11.1. Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

Product	Species	Test Results
EVAPO-RUST		
<b>Acute</b>		
<b>Oral</b>		
ATEmix		28445.2 mg/kg
Components	Species	Test Results

Organic acid		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Mouse	5000 mg/kg
Salt of an Organic Acid		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	940 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory sensitisation** Based on available data, the classification criteria are not met.

**Skin sensitisation** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Mixture versus substance information** Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Organic acid		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	LC50 Daphnia	1535 mg/l, 24 hours
Fish	LC50 Fish	440 mg/l, 48 hours
Salt of an Organic Acid		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50 Algae	9.16 mg/l, 96 hours
Crustacea	EC50 Daphnia	370 - 380 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Fish > 200 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.	
<b>12.3. Bioaccumulative potential</b>		
<b>Partition coefficient n-octanol/water (log Kow)</b>		
Organic acid		-1.64
Salt of an Organic Acid		< -3.5
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	No data available.	
<b>12.5. Results of PBT and vPvB assessment</b>	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.	
<b>12.6. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Dispose of contents/container in accordance with local/regional/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. - 14.6.: Not regulated as dangerous goods.

### RID

14.1. - 14.6.: Not regulated as dangerous goods.

### ADN

14.1. - 14.6.: Not regulated as dangerous goods.

### IATA

14.1. - 14.6.: Not regulated as dangerous goods.

### IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## SECTION 15: Regulatory information

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

#### Retained direct EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

**Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

**List of abbreviations**

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.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

CAS: Chemical Abstract Service.

Ceiling: Short Term Exposure Limit Ceiling value.

CEN: European Committee for Standardization.

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.

GWP: Global Warming Potential.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MAC: Maximum Allowed Concentration.

MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

VLE: Exposure Limit Value.

VME: Exposure Average Value.

VOC: Volatile organic compounds.

vPvB: Very persistent and very bioaccumulative.

STEL: Short-term Exposure Limit.

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

**Full text of any H-statements not written out in full under Sections 2 to 15**

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Revision information**

None.

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

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