SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: Rivolta W.A.P.

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

Identified uses:

Lubricating grease

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

Bremer & Leguil GmbH
Am Burgacker 30 - 42
47051 Duisburg / Germany
info@bremer-leguil.de

Telephone: +49(0)203/9923-0

Contact Person: Bremer & Leguil GmbH - Product Safety Management
E-mail: product-safety@bremer-leguil.de

1.4 Emergency telephone number:

+49 (0)613119240 (Giftinformationszentrum Mainz 00:00-24:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

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

Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye damage	Category 1	H318: Causes serious eye damage.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 2	H411: Toxic to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Contains: Lime hydrate
Ca-sulfonate

Signal Words: Danger

Hazard Statement(s):
H315: Causes skin irritation.
H318: Causes serious eye damage.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
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/ physician.

Disposal:
P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Supplemental label information
EUH208: Contains: Calcium Sulfonate, Calcium Sulfonate. May produce an allergic reaction.

2.3 Information on other hazards
By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

Endocrine disrupting properties
This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.
Contains:
Triphenyl phosphate

Results of PBT and vPvB assessment:
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information:
Mixture of the substances listed below with harmless additions.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Lime hydrate	EINECS: 215-137-3	20,00% - <50,00%	01-2119475151-45	
inorganic Zink salt	EINECS: 231-203-4	2,50% - <5,00%	01-2120768152-56	
Calcium Sulfonate	EINECS: 271-529-4	1,00% - <5,00%	01-2119492627-25	
Ca-sulfonate	EINECS: 932-231-6	1,00% - <3,00%	01-2119560592-37	
Calcium Sulfonate	EINECS: 263-093-9	1,00% - <5,00%	01-2119488992-18	
Ca Sulfonate	EINECS: 274-263-7	0,10% - <1,00%	01-2119492616-28	
Triaryl phosphate, alkylated	EC: 700-990-0	0,10% - <1,00%	01-2119519251-50	
phenolic antioxidant	EINECS: 204-881-4	0,25% - <1,00%	01-2119565113-46	
Amine aromatic , alkylated	EINECS: 270-128-1	0,10% - <1,00%	01-2119491299-23	
Zn compound	EINECS: 215-222-5	0,10% - <0,25%	01-2119463881-32	
Triphenyl phosphate	EINECS: 204-112-2	0,10% - <1,00%		**

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Classification

Chemical name	Identifier	Classification	
Lime hydrate	EINECS: 215-137-3	CLP:	Eye Dam. 1;H318, STOT SE 3;H335, Skin Irrit. 2;H315
inorganic Zink salt	EINECS: 231-203-4	CLP:	Aquatic Chronic 1;H410, Aquatic Acute 1;H400
Calcium Sulfonate	EINECS: 271-529-4	CLP:	Skin Sens. 1B;H317
Ca-sulfonate	EINECS: 932-231-6	CLP:	Eye Dam. 1;H318, Skin Irrit. 2;H315, Aquatic Chronic 3;H412
Calcium Sulfonate	EINECS: 263-093-9	CLP:	Skin Sens. 1B;H317
Ca Sulfonate	EINECS: 274-263-7	CLP:	Skin Sens. 1B;H317
Triaryl phosphate, alkylated	EC: 700-990-0	CLP:	Aquatic Acute 1;H400, Aquatic Chronic 2;H411; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1
phenolic antioxidant	EINECS: 204-881-4	CLP:	Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1
Amine aromatic , alkylated	EINECS: 270-128-1	CLP:	Repr. 2;H361f, Aquatic Chronic 3;H412
Zn compound	EINECS: 215-222-5	CLP:	Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1
Triphenyl phosphate	EINECS: 204-112-2	CLP:	Aquatic Acute 1;H400, Aquatic Chronic 2;H411

CLP: Regulation No. 1272/2008.

specific concentration limit

Chemical name	Identifier	specific concentration limit	Hazard class	Hazard Category	Hazard statements
Calcium Sulfonate	EINECS: 271-529-4	>= 10 %	Skin sensitizer	1B	H317
Calcium Sulfonate	EINECS: 263-093-9	>= 10 %	Skin sensitizer	1B	H317
Ca Sulfonate	EINECS: 274-263-7	>= 10 %	Skin sensitizer	1B	H317

For the wording of the listed hazard statements refer to section 16.

Endocrine disrupting properties:

Triphenyl phosphate	Endocrine disrupting properties (Article 57(f) - environment)

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Nota L/ Nota N of Annex VI of Regulation EC 1272/2008."

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO2, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

Unsuitable extinguishing media: Water with a full water jet.

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 fire-fighting procedures: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water inaccordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: In case of spills, beware of slippery floors and surfaces. Not required.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Scrape up spillage or absorb with absorbing material. Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.

7.2 Conditions for safe storage, including any incompatibilities: Local regulations concerning handling and storage of waterpolluting products have to be followed.

7.3 Specific end use(s): Not applicable

Storage Class: 11, Combustible solids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. 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: Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to inhandling the chemicals or the mineral oil products.

Eye/face protection:	Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.
Skin protection	
Hand Protection:	Material: Nitrile butyl rubber (NBR). Min. Breakthrough time: >= 480 min Recommended thickness of the material: >= 0,38 mm Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other:	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
Respiratory Protection:	Not relevant, due to the form of the product.
Thermal hazards:	Not known.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	solid
Form:	Paste
Color:	Light brown
Odor:	Characteristic
pH:	substance/mixture is non-soluble (in water)
Drop Point:	250 °C (IP 396)
Boiling Point:	not determined
Flash Point:	Not applicable
Flammability (solid, gas):	not determined
Explosion Limit - Upper (%):	Not applicable for mixtures
Explosion Limit - Lower (%):	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	1,20 g/cm3 (15 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures

Auto-ignition temperature:	not determined
Decomposition Temperature:	not determined
NLGI:	2
Particle characteristics:	Study technically not feasible
9.2 Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Stable under normal use conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	Causes eye irritation.

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

Acute toxicity

Oral

Product:	Not classified for acute toxicity based on available data.

Specified substance(s)

Lime hydrate	LD 50 (Rat): 7.340 mg/kg
Calcium Sulfonate	LD 50 (Rat): > 5.001 mg/kg
Calcium Sulfonate	LD 50 (Rat): > 16.000 mg/kg
Ca Sulfonate	LD 50 (Rat): > 5.000 mg/kg (OECD 401)
Triaryl phosphate, alkylated	LD 50 (Rat): > 5.001 mg/kg
phenolic antioxidant	LD 50 (Rat): > 2.930 mg/kg (OECD 401)
Amine aromatic , alkylated	LD 50 (Rat): > 5.000 mg/kg (OECD 401)
Zn compound	LD 50 (Rat): > 15.000 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Calcium Sulfonate	LD 50 (Rabbit): > 5.001 mg/kg
Calcium Sulfonate	LD 50 (Rat): > 5.001 mg/kg
Ca Sulfonate	LD 50 (Rabbit): > 5.000 mg/kg (OECD 402)
phenolic antioxidant	LD 50 (Rat): > 5.000 mg/kg (OECD 402)

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

Lime hydrate	LC 50 (Rat, 4 h): 6,04 mg/l Dust and mist
Zn compound	LC 50 (Rat, 4 h): 5,7 mg/l

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are met.

Specified substance(s)

Calcium Sulfonate	OECD 404 (Rabbit): Not irritant.
Ca-sulfonate	OECD 404 Slightly irritating.
Calcium Sulfonate	OECD 404 (Rabbit): Not irritant.
Ca Sulfonate	OECD 404 (Rabbit): Not irritant.

Serious Eye Damage/Eye Irritation:

Product:	Based on available data, the classification criteria are met.
Specified substance(s)	
Calcium Sulfonate	OECD 405 (Rabbit): Not irritant.
Ca-sulfonate	OECD 405 May cause burns.
Amine aromatic , alkylated	OECD 405 (Rabbit): Not irritant.

Respiratory or Skin Sensitization:

Product:	Skin sensitizer: Based on available data, the classification criteria are not met. Respiratory sensitizer: Based on available data, the classification criteria are not met.
Specified substance(s)	
Calcium Sulfonate	May cause sensitization by skin contact.
Ca-sulfonate	, OECD 406-1 (Guinea Pig) Based on available data, the classification criteria are not met.
Calcium Sulfonate	May cause sensitization by skin contact.
Ca Sulfonate	May cause sensitization by skin contact.
phenolic antioxidant	No sensitizing effect (guinea pig); OECD 406
Amine aromatic , alkylated	No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

Product:	Based on available data, the classification criteria are not met.
In vitro	
Specified substance(s)	
Ca-sulfonate	(OECD 471) Based on available data, the classification criteria are not met.

Carcinogenicity

Product:	Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:	Based on available data, the classification criteria are not met.
Specified substance(s)	
Amine aromatic , alkylated	oral (Rat, OECD 421), Suspected of damaging fertility.

Specific Target Organ Toxicity - Single Exposure

Product:	Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish

Specified substance(s)

Lime hydrate	LC 50 (Fish, 96 h): 50,6 mg/l (OECD 203)
Calcium Sulfonate	LL 50 (Cyprinodon variegatus, 96 h): > 10.000 mg/l (OECD 203)
Ca-sulfonate	LL 50 (Fish, 96 h): > 1 mg/l (OECD 203) LL 50 (Fish, 96 h): < 10 mg/l (OECD 203)
Calcium Sulfonate	LC 50 (Fish, 96 h): > 10.000 mg/l (OECD 203)
Ca Sulfonate	LC 50 (Fish, 96 h): > 1.001 mg/l (OECD 203)
Triaryl phosphate, alkylated	LC 50 (Fish, 96 h): 0,8 mg/l
Amine aromatic , alkylated	LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)

Aquatic Invertebrates

Specified substance(s)

Lime hydrate	EC 50 (Water Flea, 48 h): 49,1 mg/l (OECD 202)
inorganic Zink salt	EC 50 (Water Flea, 48 h): 26 mg/l
Calcium Sulfonate	EL50 (Daphnia magna, 48 h): > 1.000 mg/l
Ca-sulfonate	LL 50 (Water Flea, 48 h): 2,9 mg/l (OECD 202)
Calcium Sulfonate	EC 50 (Water Flea, 48 h): > 100 mg/l (OECD 202)
Ca Sulfonate	EC 50 (Water Flea, 48 h): > 1.001 mg/l
Triaryl phosphate, alkylated	EC 50 (Water Flea, 48 h): 0,202 mg/l

phenolic antioxidant	EC 50 (Water Flea, 48 h): 0,61 mg/l (OECD 202)
Amine aromatic , alkylated	EC 50 (Daphnia magna): 51 mg/l (OECD 202)
Zn compound	EC 50 (Water Flea, 48 h): 2,2 mg/l

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish
Specified substance(s)

Triaryl phosphate, alkylated	NOEC (Fish, 90 d): 0,093 mg/l

Aquatic Invertebrates
Specified substance(s)

Lime hydrate	NOEC (Water Flea, 14 d): 32 mg/l
Triaryl phosphate, alkylated	NOEC (Water Flea, 21 d): 0,0399 mg/l
phenolic antioxidant	NOEC (Water Flea, 21 d): > 0,39 mg/l

Toxicity to Aquatic Plants
Specified substance(s)

Lime hydrate	NOEC (Alga, 72 h): 48 mg/l EC 50 (Alga, 72 h): 184,57 mg/l
inorganic Zink salt	EC 50 (Algae, 72 h): 0,233 mg/l (OECD 201)
Calcium Sulfonate	EL50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 1.000 mg/l
Ca-sulfonate	EC 50 (Alga, 96 h): 29 mg/l
Ca Sulfonate	EC 50 (Alga, 72 h): > 1.000 mg/l
Triaryl phosphate, alkylated	EC 50 (Alga, 72 h): 1,4 mg/l NOEC (Alga, 72 h): 0,05 mg/l
Amine aromatic , alkylated	EC 50 (72 h): > 100 mg/l (OECD 201)
Zn compound	EC 50 (Alga, 72 h): 0,17 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Specified substance(s)

Ca-sulfonate	(OECD 301B) Readily biodegradable
Calcium Sulfonate	8,6 % (28 d) Not easily biodegradable
Triaryl phosphate, alkylated	61 % (28 d) Readily biodegradable
phenolic antioxidant	30 % (OECD 302C) Not readily degradable.
Amine aromatic , alkylated	Not readily degradable.

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

Specified substance(s)

phenolic antioxidant	May be accumulated in organism

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment: The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Endocrine disrupting properties

Product: This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Specified substance(s)

Triphenyl phosphate	The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

12.7 Other adverse effects: Toxic to aquatic life with long lasting effects.

Water Hazard Class (WGK): WGK 2: significantly water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

European Waste Codes

12 01 12*: spent waxes and fats

SECTION 14: Transport information

ADR/RID

14.1 UN number or ID number:	UN 3077
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(inorganic Zink salt)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
Hazard No. (ADR):	90
Tunnel restriction code:	(-)
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	–

IMDG

14.1 UN number or ID number:	UN 3077
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(inorganic Zink salt)
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
14.3 Packing Group:	III
14.5 Environmental hazards:	Marine pollutant
14.6 Special precautions for user:	–

IATA

14.1 UN number or ID number:	UN 3077
14.2 Proper Shipping Name:	Environmentally hazardous substance, solid, n.o.s.(inorganic Zink salt)
14.3 Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	–

Amounts up to 5kg or 5 L are not regulated, (ADR/RID SP 375, IMDG 2.10.2.7, IATA SP A197)

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:

EU Regulations

EU. Regulation 2024/590/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

National Regulations

Water Hazard Class (WGK): WGK 2: significantly water-endangering.

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

DIRECTIVE 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances

Hazard category in accordance with Regulation (EC) No 1272/2008	Qualifying quantity for the application of Lower-tier requirements:	Qualifying quantity for the application of Upper-tier requirements:
E2: E2. Hazardous to the aquatic environment	200 t	500 t

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Other information: The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement

Revision Date: 06.02.2025

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.

Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative