

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

E589-AE4 hebro®multiplus

Version: 2.12

Revision Date: 20.08.2024

Print Date: 21.08.2024

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

1.1 Product identifier

Trade name : E589-AE4 hebro®multiplus

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

Use of the Sub- : Creeping and fine oil
stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : hebro chemie- ZN der Rockwood Specialties Group
GmbH
Rostocker Str. 40
41199 Mönchengladbach
Contact person : Zentrale hebro chemie
Telephone : +49 (0) 2166 6009-0
Telefax : +49 (0) 2166 6009-99
Contact person product safety : Abteilung Produktsicherheit
Telephone : +49(0)2166 6009-311
E-mail address : msds.de@hebro-chemie.de

1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:
+49 (0) 361 730 730

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 2 H223: Flammable aerosol.
H229: Pressurised container: May burst if heated.
Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

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Hazard statements : H223 Flammable aerosol.
H229 Pressurised container: May burst if heated.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P280 Wear protective gloves/ eye protection/ face protection.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L)

Additional Labelling

Restricted to professional users.

The following percentage of the mixture consists of ingredient(s) with unknown acute oral toxicity: 6.91 %

The following percentage of the mixture consists of ingredient(s) with unknown acute dermal toxicity: 6.91 %

The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 6.91 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 6.91 %

2.3 Other hazards

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.

Ecological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

Toxicological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Penetrating oil based on highly purified hydrocarbons additive with lubricant components

Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)
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	Registration number		
Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L)	Not Assigned 918-481-9 01-2119457273-39	Muta. 1B; H340 Carc. 1B; H350 Asp. Tox. 1; H304	>= 50 - < 65
Distillates (petroleum), hydrotreated light paraffinic (Nota L)	64742-55-8 265-158-7 01-2119487077-29	Asp. Tox. 1; H304 Carc. 1B; H350	>= 10 - < 25
calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)	1474044-79-5 01-2119980985-16	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 2.5 - < 10
Mixture of tert-butylated/ iso-butylated triphenyl phosphate; triphenyl phosphate > 0,25% < 25%	68937-40-6 273-065-8	Aquatic Chronic 2; H411	>= 2.5 - < 10
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6 271-529-4 01-2119492627-25	Skin Sens. 1B; H317 specific concentration limit Skin Sens. 1B; H317 10 - 100 %	>= 0.1 - < 1
Substances with a workplace exposure limit :			
Butane	106-97-8 203-448-7 601-004-00-0 01-2119474691-32	Flam. Gas 1; H220 Press. Gas	>= 2.5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : Provide fresh air.
Keep patient warm and at rest.
- In case of skin contact : Take off all contaminated clothing immediately.
After contact with skin, wash immediately with plenty of soap and water.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If swallowed : Do NOT induce vomiting.
Keep at rest.

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Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause genetic defects.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry powder
Water spray jet

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Carbon monoxide
Nitrogen oxides (NO_x)
Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Use water spray to cool unopened containers.
Suppress (knock down) gases/vapours/mists with a water spray jet.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Do not breathe vapours, aerosols.

6.2 Environmental precautions

Environmental precautions : Inform the relevant authorities if it enters sewers, aquatic environment or soil.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite)

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and transfer to a container for disposal according to local /
national regulations (see section 13).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep away from open flames, hot surfaces and sources of ignition.
Take precautionary measures against static discharges.
For personal protection see section 8.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Follow the water regulations. Keep only in the original container in a cool, well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Protect from heat and sunlight. Keep away from sources of ignition - No smoking.

Advice on common storage : Incompatible with oxidizing agents.

7.3 Specific end use(s)

Specific use(s) : Creeping and fine oil

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Butane	106-97-8	TWA	600 ppm 1,450 mg/m ³	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		STEL	750 ppm 1,810 mg/m ³	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		STEL	750 ppm 1,810 mg/m ³	GB EH40

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	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		TWA	600 ppm 1,450 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			
		STEL	750 ppm 1,810 mg/m3	GB EH40
	Further information: Capable of causing cancer and/or heritable genetic damage.			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)	Workers	Skin contact	Long-term systemic effects	0.00032 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	2.23 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate)	Fresh water	0.00027 mg/l
	Marine water	0.000027 mg/l
	Sewage treatment plant	10 mg/l
	Intermittent use/release	0.0027 mg/l
	Fresh water sediment	4.69 mg/kg
	Marine sediment	0.469 mg/kg
	Soil	0.936 mg/kg

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

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Material	:	Protective gloves complying with EN 374.
Break through time	:	> 60 min
Protective index	:	Class 3
Material	:	Nitrile rubber
Glove thickness	:	0.4 mm
Material	:	butyl-rubber
Glove thickness	:	0.5 mm
Remarks	:	The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.
Skin and body protection	:	Chemical resistant protective clothing according to DIN EN 13034 (Type 6) Work uniform or laboratory coat.
Respiratory protection	:	If product forms vapours or aerosols wear breathing protection.
Filter type	:	Combined acidic gas/vapour, ammonia/amines and organic vapour type (AEK)
Protective measures	:	Follow the skin protection plan.

Environmental exposure controls

Water : Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	aerosol
Colour	:	colourless
Odour	:	odourless
Melting point/freezing point	:	Not applicable
Boiling point/boiling range	:	Not applicable
Upper explosion limit / Upper flammability limit	:	Upper flammability limit 6.5 %(V)
Lower explosion limit / Lower	:	Lower flammability limit

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flammability limit	0.6 %(V)
Flash point	: < 1 °C
Auto-ignition temperature	: 230 °C
pH	: Not applicable
Viscosity Viscosity, kinematic	: Not applicable
Solubility(ies) Water solubility	: insoluble
Partition coefficient: n- octanol/water	: Not applicable
Vapour pressure	: Not applicable
Density	: 0.73 g/cm ³ (20 °C) Method: DIN 51757
Relative vapour density	: not determined

9.2 Other information

Explosives	: Vapours may form explosive mixture with air.
Substances and mixtures, which in contact with water, emit flammable gases	: In use, may form flammable/explosive vapour-air mixture.
Metal corrosion rate	: Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

The product is chemically stable.

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10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified due to lack of data.

Components:

Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402

Distillates (petroleum), hydrotreated light paraffinic (Nota L):

Acute oral toxicity : LD50 (Rat): > 5,000.0 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg

calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate):

Acute oral toxicity : LD50 (Rat): > 2,500 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50: > 10,000 mg/kg

Mixture of tert-butylated/ iso-butylated triphenyl phosphate; triphenyl phosphate > 0,25% < 25%:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified due to lack of data.

Serious eye damage/eye irritation

Not classified due to lack of data.

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Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

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

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

Further information

Product:

Remarks : According to many years of experience, there are no known harmful effects when handled properly.
Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L):

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- Toxicity to fish : (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- NOEC (Pseudokirchneriella subcapitata (green algae)): 1,000 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate):

- Toxicity to fish : LC50 (Fish): > 0.28 mg/l
Exposure time: 96 h
Test substance: Read-across (Analogy)
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 0.27 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : NOEC (Algae): > 0.27 mg/l
Exposure time: 72 h
- M-Factor (Acute aquatic toxicity) : 1
- M-Factor (Chronic aquatic toxicity) : 1

Mixture of tert-butylated/ iso-butylated triphenyl phosphate; triphenyl phosphate > 0,25% < 25%:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.4 mg/l
Exposure time: 96 h
- LC50 (Pimephales promelas (Fathead minnow)): 42.3 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 3.9 mg/l
Exposure time: 48 h

12.2 Persistence and degradability

Product:

- Biodegradability : Remarks: No data available

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12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Components:

calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate):

Distribution among environmental compartments : Adsorption/Soil
log Koc: 5.24
Remarks: Information taken from reference works and the literature.

12.5 Results of PBT and vPvB assessment

Product:

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.

12.6 Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

12.7 Other adverse effects

Product:

Additional ecological information : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number or ID number

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ADR : UN 1950

RID : UN 1950

IMDG : UN 1950

IATA : UN 1950

14.2 UN proper shipping name

ADR : AEROSOLS

RID : AEROSOLS

IMDG : AEROSOLS

IATA : Aerosols, flammable

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	: 2	2.1
RID	: 2	2.1
IMDG	: 2.1	
IATA	: 2.1	

14.4 Packing group

ADR

Packing group : Not assigned by regulation
Classification Code : 5F
Labels : 2.1
Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation
Classification Code : 5F
Hazard Identification Number : 23
Labels : 2.1

IMDG

Packing group : Not assigned by regulation
Labels : 2.1
EmS Code : F-D, S-U
Remarks : "IMDG-Code segregation group not applicable", Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS or WASTE GAS CARTRIDGES: Category C, Clear of living quarters., For AEROSOLS with a capacity ≤ 1L: segr. as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a cap. > 1L: segr. as for the appr. subdiv. of class 2. For WASTE AEROSOLS: segr. as for the appr. subdiv. of class 2.

IATA (Cargo)

Packing instruction (cargo aircraft) : 203
Packing instruction (LQ) : Y203

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Packing group : Not assigned by regulation
Labels : Flammable Gas

IATA_P (Passenger)

Packing instruction (passenger aircraft) : 203
Packing instruction (LQ) : Y203
Packing group : Not assigned by regulation
Labels : Flammable Gas

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 28: Isobutane Number on list 28: Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L), Distillates (petroleum), hydrotreated light paraffinic (Nota L) Number on list 29: Isobutane Number on list 29: Hydrocarbons, C10 - C13, n-alkanes, isoalkanes, cyclics, < 2 % aromatics (Note L)
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable

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Regulation (EC) on substances that deplete the ozone layer : Not applicable

UK REACH List of substances subject to authorisation (Annex XIV) : Not applicable

GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation : Not applicable

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H220	: Extremely flammable gas.
H304	: May be fatal if swallowed and enters airways.
H317	: May cause an allergic skin reaction.
H340	: May cause genetic defects.
H350	: May cause cancer.
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.

Full text of other abbreviations

Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Carc.	: Carcinogenicity
Flam. Gas	: Flammable gases
Muta.	: Germ cell mutagenicity
Press. Gas	: Gases under pressure
Skin Sens.	: Skin sensitisation
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	: Short-term exposure limit (15-minute reference period)

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; 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

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- 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

Further information

Other information : The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Classification of the mixture:

Aerosol 2	H223, H229
Aquatic Chronic 3	H412

Classification procedure:

Calculation method
Calculation method

GB / EN