

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 3/27/2024 Revision date: 10/15/2024 Supersedes version of: 3/27/2024 Version: 2.0

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

1.1. Product identifier

Product form	: Substance
Substance name	: Damascenone Total (Fir)
IUPAC name	: (E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one
EC-No.	: 245-844-2
CAS-No.	: 23726-93-4
REACH registration No.	: 01-2120105798-49
Product code	: 23151
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 Use of the substance/mixture

Professional use,Consumer useFragrance raw material

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

De Hekserij Spoorstraat 57 8271 RG IJsselmuiden Nederland www.hekserij.nl

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture		
Classification according to Regulation (EC) No. 1272/200	8 [CLP]	
Skin corrosion/irritation, Category 2	H315	
Skin sensitisation, category 1A	H317	
Hazardous to the aquatic environment – Chronic Hazard,	H411	
Category 2		

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) N	o. 1272/2008 [CLP]
Hazard pictograms (CLP)	

Signal word (CLP) Hazard statements (CLP)

- : Warning
- : H315 Causes skin irritation.

GHS07

H317 - May cause an allergic skin reaction.

GHS09

H411 - Toxic to aquatic life with long lasting effects.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautionary statements (CLP) :	 P280 - Wear protective gloves, protective clothing. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Extra phrases :	Allergenic fragrances > 0.01 %: TRANS-ROSE KETONE-2.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Damascenone Total (Fir)	CAS-No.: 23726-93-4 EC-No.: 245-844-2 REACH-no: 01-2120105798- 49	99 – 100	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411
beta-Damascone	CAS-No.: 23726-91-2 EC-No.: 245-842-1 REACH-no: 01-2120094433- 55	0.1 – 0.5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
alpha-Damascone	CAS-No.: 24720-09-0 EC-No.: 246-430-4 REACH-no: 01-2120105799- 47	0.1 – 0.5	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317 Aquatic Chronic 2, H411

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact	 If you feel unwell, seek medical advice. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact First-aid measures after ingestion First-aid measures for first aider	 Rinse eyes with water as a precaution. Call a poison center or a doctor if you feel unwell. First aid workers will be equipped with suitable personal protective equipment.
4.2. Most important symptoms and eff	fects, both acute and delayed
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 Irritation. May cause an allergic skin reaction. None under normal conditions. None under normal conditions.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released. 	
5.3. Advice for firefighters		
Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipn	nent and emergency procedures	
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
6.1.1. For non-emergency personnel		
	 Wear recommended personal protective equipment. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. 	
6.1.2. For emergency responders		
Protective equipment Emergency procedures	 Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Evacuate unnecessary personnel. Stop leak if safe to do so. 	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment a	nd cleaning up	
For containment Methods for cleaning up Other information	 Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site. 	
6.4. Reference to other sections		

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including any incompatibilities		
Technical measures Storage conditions Packaging materials	 Keep in a cool, well-ventilated place away from heat. Keep cool. Protect from sunlight. Store always product in container of same material as original container. 	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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

Damascenone Total (Fir) (23726-93-4)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	0.77 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	2.71 mg/m ³	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral	0.38 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0.67 mg/m³	
Long-term - systemic effects, dermal	0.38 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	1.09 µg/l	
PNEC aqua (marine water)	0.11 µg/l	
PNEC aqua (intermittent, freshwater)	10.9 µg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.087 mg/kg dwt	
PNEC sediment (marine water)	8.67 µg/kg dw	
PNEC (Soil)		
PNEC soil	0.017 mg/kg dwt	
PNEC (Oral)		
PNEC oral (secondary poisoning)	6.67 mg/kg food	
PNEC (STP)		
PNEC sewage treatment plant	3.2 mg/l	
8.1.5. Control banding	· · · ·	

8.1.5. Control banding

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. **Personal protective equipment symbol(s):**



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 1.8 °C Atm. press.: 1012 hPa Decomposition: 'no'
Freezing point	: No data available
Boiling point	: 199 °C Atm. press.: 1013 hPa Decomposition: 'no'
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 3 Pa Temp.: 25 °C
Relative vapour density at 20°C	: No data available
Relative density	: 0.9464 Type: 'relative density' Temp.: 20 °C
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: 3.4
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information	
11.1 Information on toxicological effects	
Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):	Not classified
Damascenone Total (Fir) (23726-93-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.1 (Acute Toxicity (Oral))
beta-Damascone (23726-91-2)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
alpha-Damascone (24720-09-0)	
LD50 oral rat	1670 mg/kg
LD50 dermal rat	2900 mg/kg
Skin corrosion/irritation : Serious eye damage/irritation : Respiratory or skin sensitisation :	Causes skin irritation. Not classified
Germ cell mutagenicity	May cause an allergic skin reaction. Not classified
Carcinogenicity : Reproductive toxicity :	Not classified Not classified
STOT-single exposure : STOT-repeated exposure :	Not classified Not classified.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Damascenone Total (Fir) (23726-93-4)	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	30 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
alpha-Damascone (24720-09-0)	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	30 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard :	Not classified

SECTION 12: Ecological information	
12.1. Toxicity	
Hazardous to the aquatic environment, short-term : (acute)	Toxic to aquatic life with long lasting effects. Not classified Toxic to aquatic life with long lasting effects.
Damascenone Total (Fir) (23726-93-4)	
LC50 - Fish [1]	1.09 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	9 mg/l Test organisms (species): Daphnia sp.
EC50 72h - Algae [1]	8.3 mg/l Test organisms (species): other:
beta-Damascone (23726-91-2)	
EC50 - Crustacea [1]	9.5 mg/l Test organisms (species): Daphnia sp.
EC50 72h - Algae [1]	8.8 mg/l Test organisms (species): other:
alpha-Damascone (24720-09-0)	
LC50 - Fish [1]	1.09 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	2.37 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	5 mg/l Test organisms (species): other:
12.2. Persistence and degradability	
Damascenone Total (Fir) (23726-93-4)	
Persistence and degradability	Not rapidly degradable
Damascenone Total (Fir) (23726-93-4)	
Persistence and degradability	Not rapidly degradable
beta-Damascone (23726-91-2)	
Persistence and degradability	Not rapidly degradable
alpha-Damascone (24720-09-0)	
Persistence and degradability	Not rapidly degradable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.3. Bioaccumulative potential		
Damascenone Total (Fir) (23726-93-4)		
Partition coefficient n-octanol/water (Log Kow) 3.4		
beta-Damascone (23726-91-2)		
Partition coefficient n-octanol/water (Log Kow) 3.68		
alpha-Damascone (24720-09-0)		
Partition coefficient n-octanol/water (Log Kow) ≥ 3.66		
12.4. Mobility in soil		

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods Sewage disposal recommendations	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number		· · · ·		
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shippir	ng name	1		I
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir))	Environmentally hazardous substance, liquid, n.o.s. (Damascenone Total (Fir))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir))
Transport document desc	ription	· · · ·		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir)), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir)), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Damascenone Total (Fir)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Damascenone Total (Fir)), 9, III
14.3. Transport hazard	class(es)	· · · ·		
9	9	9	9	9

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	ΙΑΤΑ	ADN	RID
	9 ¥2			
14.4. Packing group				
III	Ш	III	Ш	III
14.5. Environmental haza	rds			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information	available			
14.6. Special precautions	for user			
Overland transport Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Excepted quantities (ADR) Packing instructions (ADR) Special packing provisions (ADR Mixed packing provisions (ADR Portable tank and bulk container (ADR) Tank code (ADR) Vehicle for tank carriage Transport category (ADR) Special provisions for carriage - Special provisions for carriage - Special provisions for carriage - and handling (ADR) Hazard identification number (K Orange plates	: 5 : F : F : F : F : F : F : N : N : N : T : T : T : T : C : A : 3 - Packages (ADR) : V - Loading, unloading : C : C : C : S : S : S : S : S : S : S : S	274, 335, 375, 601 51 5001, IBC03, LP01, R001 2P1 MP19 54 P1, TP29 GBV NT 55		
Tunnel restriction code (ADR) Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Special packing provisions (IMDG) BC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Air transport PCA Excepted quantities (IATA) PCA limited quantity max net quantity (IATA) PCA max net quantity (IATA)	: 5 : E : L DG) : F :) : II : T) : T : T : S : A : S : A : S : A : Y uantity (IATA) : 3 .) : S	E1 P01, P001 PP1 BC03 F4 P1, TP29 E-A S-F		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	: 964 : 450L : A97, A158, A197, A215 : 9L
Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Carriage permitted (ADN) Equipment required (ADN) Number of blue cones/lights (ADN)	 M6 274, 335, 375, 601 5 L E1 T PP 0
Rail transportClassification code (RID)Special provisions (RID)Limited quantities (RID)Excepted quantities (RID)Packing instructions (RID)Special packing provisions (RID)Mixed packing provisions (RID)Portable tank and bulk container instructions (RID)Portable tank and bulk container special provisions (RID)Tank codes for RID tanks (RID)Transport category (RID)Special provisions for carriage – Packages (RID)Special provisions for carriage - Loading, unloading and handling (RID)Colis express (express parcels) (RID)Hazard identification number (RID)	: TP1, TP29 : LGBV : 3 : W12

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Damascenone Total (Fir) ; beta-Damascone ; alpha- Damascone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Damascenone Total (Fir) ; beta-Damascone ; alpha- Damascone	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	The substance is not listed
SZW-lijst van mutagene stoffen	:	The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	The substance is not listed
SZW-lijst van reprotoxische stoffen –	:	The substance is not listed
Vruchtbaarheid		
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	The substance is not listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Abbreviations and acronyms:	
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
Skin Sens. 1B	Skin sensitisation, category 1B

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.