

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment
Regulation (EU) 2020/878

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

1.1. Product identifier

Trade name	ND-OIL 8
Product code	4816
SDS Number	4816
Product use	Professional use

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

Relevant identified uses	Compressor oil for air conditioning systems
Uses advised against	None known

1.3. Details of the supplier of the safety data sheet

Supplier

DENSO Europe B.V.
Hogeweyselaan 165
1382 JL Weesp - Netherlands
T +31-294-493493 - F +31-294-417122
EU_DNEU_MSDS_info@eu.denso.com
www.denso-am.eu

1.4. Emergency telephone number

+31 (0)294 493 493 (Mo. - Fr. 08:30 - 17:00 CET)

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Health hazards	Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Environmental hazards	Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life.
	Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Signal word

Warning

Contains

tris(nonylphenyl) phosphite; Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-methyl-.omega.-methoxy-

Hazard statements

H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.
P280 Wear protective gloves.

Response

P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P391 Collect spillage.

Supplemental hazard information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

3. SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
Poly[oxy(methyl-1,2-ethanediy)], .alpha.-methyl-.omega.-methoxy-	24991-61-5 680-480-1 -	50 - < 100	Skin Sens. 1, H317	
Tetradecyloxirane	7320-37-8 230-786-2	1 - < 10	Skin Irrit. 2, H315 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410	
Tris(methylphenyl) phosphate	1330-78-5 809-930-9 01-2119531335-46-XXXX	0,1 - < 3	Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4 01-2119565113-46-XXXX	0,1 - < 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
tris(nonylphenyl) phosphite	26523-78-4 701-028-2 - 01-2119520601-54-XXXX	0,1 - < 1	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	substance listed as REACH Candidate

Full text of H-statements: see section 16

4. SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

Inhalation

Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.

Skin contact:	Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Eyes contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth thoroughly. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell.

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

Symptoms/effects after skin contact May cause an allergic skin reaction.

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

Treat symptomatically.

5. SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.
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

Hazardous combustion products During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Precautionary measures fire Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Firefighting instructions Use standard firefighting procedures and consider the hazards of other involved materials.
Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment Wear appropriate protective equipment and clothing during clean-up. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ventilate spillage area. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures Keep unnecessary personnel away.

6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

For containment Stop leak without risks if possible. Move containers from fire area if it can be done without personal risk.

Methods for cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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 in original containers for re-use.

Other information The product is immiscible with water and will spread on the water surface. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Protect material from direct sunlight. Avoid contact with skin and eyes. Avoid breathing mist, vapours. Wear personal protective equipment.

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 and protective equipment to remove contaminants. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in original tightly closed container. Store in a well-ventilated place. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Compressor oil for air conditioning systems.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

United Kingdom

Regulation	Substance	Type	Value
EH40. HSE	2,6-di-tert-butyl-p-cresol (128-37-0) 2,6-Di-tert-butyl-p-cresol	WEL TWA (OEL TWA) [1]	10 mg/m ³

DNEL: Derived no effect level

No data available

Components	Type	Route	Value	Form
Tris(methylphenyl) phosphate (1330-78-5)	Worker	Dermal	0.41 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.18 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.02 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.03 mg/m ³	Long-term - systemic effects
2,6-di-tert-butyl-p-cresol (128-37-0)	Worker	Dermal	0.5 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	3.5 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.25 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.86 mg/m ³	Long-term - systemic effects
tris(nonylphenyl) phosphite (26523-78-4)	Worker	Dermal	16.7 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	23.6 mg/m ³	Long-term - systemic effects

Consumer	Oral	1.67 mg/kg bodyweight/day	Long-term - systemic effects
	Inhalation	11.8 mg/m ³	Long-term - systemic effects
	Dermal	8.35 mg/kg bodyweight/day	Long-term - systemic effects

PNEC: Predicted no effect concentration

No data available

Components	Type	Route	Value	Form
Tris(methylphenyl) phosphate (1330-78-5)	Not applicable	Freshwater	0.001 mg/l	
		Freshwater	0.001 mg/l	Intermittent release
		sediment	2.05 mg/kg dwt	Freshwater
		sediment	0.205 mg/kg dwt	Seawater
		Soil	1.01 mg/kg dwt	
		Oral	0.65 mg/kg food	Secondary Poisoning
		STP	100 mg/l	
2,6-di-tert-butyl-p-cresol (128-37-0)	Not applicable	Freshwater	0.199 µg/L	
		Seawater	0.02 µg/L	
		Freshwater	1.99 mg/l	Intermittent release
		sediment	99.6 µg/kg dw	Freshwater
		sediment	9.96 µg/kg dw	Seawater
		Soil	47.69 µg/kg	
		Oral	8.33 mg/kg food	Secondary Poisoning
tris(nonylphenyl) phosphite (26523-78-4)	Not applicable	Freshwater	50 µg/L	
		Seawater	50 µg/L	
		Freshwater	50 mg/l	Intermittent release
		sediment	0.15 mg/kg dwt	Freshwater
		sediment	0.15 mg/kg dwt	Seawater
		Oral	37 mg/kg food	Secondary Poisoning
		STP	1.8 mg/l	

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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

Materials for protective clothing

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

Individual protection measures, such as personal protective equipment (PPE)

Eye protection

Safety glasses with side shields. EN 166.

Skin protection

Hand protection

Protective gloves.

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	2 (> 30 minutes)	> 0.3	EN ISO 374

Other protective 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 and protective equipment to remove contaminants.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If the occupational exposure limit is exceeded: EN 141. EN 143

Skin and body protection	Wear suitable protective clothing, Long sleeved protective clothing
Thermal hazard protection	Wear appropriate thermal protective clothing, when necessary.
Environmental exposure controls	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Clear.
Odour	Characteristic.
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	204 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	0.9944 g/cm ³
Solubility	No data available
Log Pow	No data available
Viscosity, kinematic	43.32 mm ² /s @ 40°C 9.234 mm ² /s @ 100°C
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

VOC (EU)	Not applicable
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10. SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and 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	Contact with incompatible materials. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials	Strong oxidizing agents. Strong acids. Strong bases.

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

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
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
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

12. SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute)

Substance / Product	Trophic level	Species	Type	Value	Duration	Remarks
Tris(methylphenyl) phosphate (1330-78-5)	Fish	Oncorhynchus mykiss (Rainbow trout)	LC50	0.6 mg/l	96 hours	
	aquatic invertebrates	Daphnia magna	EC50	146 µg/L	48 h	
2,6-di-tert-butyl-p-cresol (128-37-0)	crustacea	Daphnia magna	EC50	0.48 mg/l	48 h	
	Fish	Danio rerio	LC0	> 0.5 mg/l	96 h	
tris(nonylphenyl) phosphite (26523-78-4)	crustacea	Daphnia magna	EC50	0.42 mg/l	48 h	
	crustacea	Daphnia magna	EC50	0.3 mg/L	48 h	
Tetradecyloxirane (7320-37-8)	algae	Pseudokirchnerella subcapitata	LC50	0,002 mg/l	72 h	(OECD 209 method)

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

Substance / Product	Trophic level	Species	Type	Value	Duration	Remarks
Tris(methylphenyl) phosphate (1330-78-5)	aquatic invertebrates	Daphnia magna	NOEC	0,1 mg/L	21 d	

12.2. Persistence and degradability

ND-OIL 8

Persistence and degradability No additional information available.

Tetradecyloxirane (7320-37-8)

Biodegradation 60 – 70 % (OECD 301B method)

12.3. Bioaccumulative potential

ND-OIL 8

Bioaccumulative potential No additional information available.

Tris(methylphenyl) phosphate (1330-78-5)

Log Kow 5.11

12.4. Mobility in soil

ND-OIL 8

Ecology - soil No additional information available.

12.5. Results of PBT and vPvB assessment

ND-OIL 8

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) 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). Dispose of in accordance with local regulations.

Waste treatment methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

Additional information Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Ecology - waste materials Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment.

European List of Waste (LoW) code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

13 02 08* other engine, gear and lubricating oils

15 01 10* packaging containing residues of or contaminated by dangerous substances

14. SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) 3082

UN-No. (IMDG) 3082

UN-No. (IATA) 3082

UN-No. (ADN) 3082

UN-No. (RID) 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tetradecyloxirane ; 2,6-di-tert-butyl-p-cresol)

Proper Shipping Name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetradecyloxirane ; 2,6-di-tert-butyl-p-cresol)
Proper Shipping Name (IATA)	Environmentally hazardous substance, liquid, n.o.s. (Tetradecyloxirane ; 2,6-di-tert-butyl-p-cresol)
Proper Shipping Name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetradecyloxirane ; 2,6-di-tert-butyl-p-cresol)
Proper Shipping Name (RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetradecyloxirane ; 2,6-di-tert-butyl-p-cresol)
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	9
Danger labels (ADR)	9
IMDG	
Transport hazard class(es) (IMDG)	9
Danger labels (IMDG)	9
IATA	
Transport hazard class(es) (IATA)	9
Hazard labels (IATA)	9
ADN	
Transport hazard class(es) (ADN)	9
Danger labels (ADN)	9
RID	
Transport hazard class(es) (RID)	9
Danger labels (RID)	9
14.4. Packing group	
Packing group (ADR)	III
Packing group (IMDG)	III
Packing group (IATA)	III
Packing group (ADN)	III
Packing group (RID)	III
14.5. Environmental hazards	
Dangerous for the environment	Yes
Marine pollutant	Yes
Other information	No supplementary information available.
14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	M6
Special provisions (ADR)	274, 335, 375, 601
Limited quantities (ADR)	5I
Packing instructions (ADR)	P001, IBC03, LP01, R001
Hazard identification number (Kemler No.)	90
Tunnel restriction code (ADR)	-
EAC code	+3Z
Transport by sea	
Special provisions (IMDG)	274, 335, 969

Limited quantities (IMDG)	5 L
Packing instructions (IMDG)	P001, LP01
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-F
Stowage category (IMDG)	A
Air transport	
PCA Excepted quantities (IATA)	E1
PCA Limited quantities (IATA)	Y964
PCA limited quantity max net quantity (IATA)	30kgG
PCA packing instructions (IATA)	964
PCA max net quantity (IATA)	450L
CAO packing instructions (IATA)	964
CAO max net quantity (IATA)	450L
Special provisions (IATA)	A97, A158, A197
ERG code (IATA)	9L
Inland waterway transport	
Classification code (ADN)	M6
Special provisions (ADN)	274, 335, 375, 601
Limited quantities (ADN)	5 L
Carriage permitted (ADN)	T
Rail transport	
Classification code (RID)	M6
Special provisions (RID)	274, 335, 375, 601
Limited quantities (RID)	5L
Packing instructions (RID)	P001, IBC03, LP01, R001
Hazard identification number (RID)	90

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

Not applicable

15. SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

ND-OIL 8 ; tris(nonylphenyl) phosphite ; Tetradecyloxirane ; Tris(methylphenyl) phosphate	3(b) 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
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ND-OIL 8 ; tris(nonylphenyl) phosphite ; 2,6-di-tert-butyl-p-cresol ; Tetradecyloxirane ; Tris(methylphenyl) phosphate	3(c) 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
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Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) (EC 701-028-2, CAS 26523-78-4)

Contains no REACH Annex XIV substances

VOC (EU)

Not applicable

Other information, restriction and prohibition regulations

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended. For details, refer to section 3 and 8.

Seveso Information
National regulations

E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. SECTION 16: Other information

Indication of changes

Section 1 - Section 16.

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
AGW	Occupational exposure limit value
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Federal Institute for Materials Research and Testing, Germany
BAT	Maximum permissible concentration of biological working substances.
BCF	Bio-concentration factor.
BLV	Biological limit values
BLV	Biological limit values (BGW, Austria)
BMGV	Biological Monitoring Guidance Value (EH40,UK).
BOD5	Biochemical oxygen demand within 5 days
BOD	Biochemical oxygen demand
bw	Body weight.
calcd.	Calculated
CAS	Chemical Abstract Service.
CEN	European Committee for Standardization
CESIO	European Committee on Organic Surfactants and their Intermediates.
COD	Chemical oxygen demand
CLP	Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR	Carcinogenic, Mutagenic or Reproduction Toxic Substances
CSA	Chemical safety assessment
CSR	Chemical Safety Report.
DMEL	Derived Minimum Effect Level.
DNEL	Derived no effect level
EAC	European waste catalogue
EC	European community
EC50	Effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
EN	European norm.
ERC	ERC (Environmental Release category)
EU	European Union
GLP	Good Laboratory Practice.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
GW/VL	Occupational exposure limit value.

GW-kw/VL-cd	Occupational exposure limit value - short term.
GW-M/VL-M	Occupational exposure limit value – "Ceiling".
IATA	International Air Transport Association
IBC code	International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
ICAO	International Civil Aviation Organization
IC50	Inhibition Concentration 50%.
IECSC	Inventory of Existing Chemical Substances in China.
IMDG	International Maritime Dangerous Goods
ISO	International Standards Organization.
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal Concentration 50%.
LCLo	Lowest published lethal concentration.
LD50	Lethal Dose 50%.
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest observable effect concentration.
LOEL	Lowest observable effect level.
LQ	Limited quantities
TRK-Kzw	Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value, Austria.
MAK-Mow	Maximum allowable workplace concentration – instantaneous value, Austria.
MAK-Tmw, TRK-Tmw	Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value, Austria.
MAK	Threshold limit values Germany.
MARPOL	International Convention for the Prevention of Pollution from Ships.
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
NOEL	no-observed-effect level
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limits
PBT	Persistent Bioaccumulative Toxic
PC (Chemical product category)	PC (Chemical product category)
PNEC	Predicted No-Effect Concentration
POCP	Photochemical ozone creation potential.
POP	Persistent Organic Pollutants
PPE	Personal protective equipment
Process category	Process category
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
SCL	Specific concentration limit.
STEL	Short-term Exposure Limit
STP	Sewage treatment plant
SU (Sector of use)	SU (Sector of use)
SVHC	Substance of Very High Concern.

TLV	Threshold Limit Value
TRGS	Technical Rules for Hazardous Substances (German Standard).
TWA	Time Weighted Average
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
VbF	Ordinance on Flammable Liquids, Austria
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
WEL-TWA	Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).
WEL-STEL	Workplace Exposure Limit-Short term exposure limit (15-minute reference period).

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006..

Training advice Normal use of this product shall imply use in accordance with the instructions on the packaging

Full text of H- and EUH-statements

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1.
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2.
Repr. 2	Reproductive toxicity, Category 2.
Skin Irrit. 2	Skin corrosion/irritation, Category 2.
Skin Sens. 1	Skin sensitisation, Category 1.
H315	Causes skin irritation..
H317	May cause an allergic skin reaction..
H361	Suspected of damaging fertility or the unborn child..
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..
EUH205	Contains epoxy constituents. May produce an allergic reaction..

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Skin Sens. 1	H317	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 2	H411	Calculation method

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.