SAFETY DATA SHEET

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	ND-OIL12
Product code	:	2681
SDS Number	:	2681
UFI	:	7QW2-X1FN-W00E-WU8C
Product use	:	Professional use

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

1.2.1. Relevant identified uses

Function or use category	:	Compressor oil for air conditioning systems

1.2.2. Uses advised against

Restrictions on use	:	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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

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.

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Hazard pictograms

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

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 soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

EUH-statements	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.

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Component	
tris(nonylphenyl) phosphite(26523-78-4)	The substance is included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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 [CLP]	Notes
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-methyl-.omega.-methoxy-	24991-61-5 680-480-1 -	50 - < 100	Skin Sens. 1, H317	
decyloxirane	2855-19-8 220-667-3 01-2119943390-42-XXXX	1 - < 2	Skin Irrit. 2, H315 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1.0)	
dodecyloxirane	3234-28-4 221-781-6 01-2119943387-29-XXXX	1 - < 2	Skin Irrit. 2, H315 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)	

Hexadec-1-ene	629-73-2 211-105-8 01-2119474686-23-XXXX	1 - < 2	Asp. Tox. 1, H304	
Tris(methylphenyl) phosphate	1330-78-5 809-930-9 01-2119531335-46-XXXX	0,1 - < 1	Repr. 2, H361 Aquatic Acute 1, H400 (M=1.0) Aquatic Chronic 1, H410 (M=1.0)	
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4 - 01-2119565113-46-XXXX	0,1 - < 1	Aquatic Chronic 1, H410 (M=1.0)	
tris(nonylphenyl) phosphite	26523-78-4 701-028-2 - 01-2119520601-54-XXXX	0.1 - < 1	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1.0) Aquatic Chronic 1, H410 (M=1.0)	ED substance listed as REACH Candidate

Comments : ED: Endocrine Disrupting Property

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a physician if symptoms develop or persist.

First-aid measures after skin contact : Wash skin with plenty of water and soap. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye 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.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Never give anything by mouth to an unconscious person.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

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 decomposition products in case of fire : During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not allow run-off from fire-fighting to enter drains or water courses.

Protection during firefighting : 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

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. For personal protection, see section 8 of the SDS.

Emergency procedures : Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment. For personal protection, see section 8 of the SDS.

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. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

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. Prevent entry into waterways, sewer, basements or confined areas.

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".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. 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 : Keep cool. Protect from sunlight. Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

Compressor oil for air conditioning systems.

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

decyloxirane (2855-19-8)

PNEC (Water)	
PNEC aqua (intermittent, freshwater)	1.71 µg/L
PNEC (STP)	
PNEC sewage treatment plant	3.6 mg/l

dodecyloxirane (3234-28-4)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	10.4 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36.7 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	6.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10.9 mg/m³
Long-term - systemic effects, dermal	6.25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.002 µg/L
PNEC aqua (marine water)	0 µg/L
PNEC aqua (intermittent, freshwater)	0.024 µg/L
PNEC (STP)	
PNEC sewage treatment plant	2.61 mg/l

tris(nonylphenyl) phosphite (26523-78-4)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	16.7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	23.6 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1.67 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11.8 mg/m³
Long-term - systemic effects, dermal	8.35 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	50 µg/L
PNEC aqua (marine water)	50 µg/L
PNEC aqua (intermittent, freshwater)	50 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.15 mg/kg dwt
PNEC sediment (marine water)	0.15 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	37 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	1.8 mg/l

2,6-di-tert-butyl-p-cresol (128-37-0)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day

Long-term - systemic effects, inhalation	1.76 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	0.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.435 mg/m³
Long-term - systemic effects, dermal	0.25 mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0.199 µg/L
PNEC aqua (marine water)	0.02 µg/L

PNEC (Sediment)

PNEC sediment (freshwater)	0.458 mg/kg dwt
PNEC sediment (marine water)	0.046 mg/kg dwt

PNEC (Soil)

PNEC soil	0.054 mg/kg dwt

PNEC (Oral)

PNEC oral (secondary poisoning)	16.67 mg/kg food

Hexadec-1-ene (629-73-2)

PNEC (Water)

PNEC aqua (freshwater)	0.001 mg/l
PNEC aqua (marine water)	0.001 mg/l
PNEC aqua (intermittent, freshwater)	0.001 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	426.58 mg/kg dwt
PNEC sediment (marine water)	426.58 mg/kg dwt

PNEC (Soil)

PNEC soil	85.3 mg/kg dwt

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

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	0.41 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.18 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	0.02 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.03 mg/m³
Long-term - systemic effects, dermal	0.15 mg/kg bodyweight/day

PNEC (Water)

PNEC aqua (freshwater)	0.001 mg/l
PNEC aqua (marine water)	0
PNEC aqua (intermittent, freshwater)	0.001 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	2.05 mg/kg dwt
PNEC sediment (marine water)	0.205 mg/kg dwt

PNEC (Soil)

PNEC soil	1.01 mg/kg dwt

PNEC (Oral)

PNEC oral (secondary poisoning)	0.65 mg/kg food

PNEC (STP)

PNEC sewage treatment plant	100 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering 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.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
EN 166. Safety glasses with side shields

8.2.2.2. Skin protection

Hand protection:
Protective gloves. ISO 374-1. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

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

Other skin protection

Materials for protective clothing:
Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment

8.2.2.3. Respiratory protection

Respiratory protection:
Not normally needed. In case of insufficient ventilation, wear suitable respiratory equipment. Filter type: A-P2

8.2.2.4. Thermal hazards

Thermal hazard protection:
Wear appropriate thermal protective clothing, when necessary.

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

Consumer exposure controls:
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.

Other information:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Appearance	:	Clear.
Odour	:	Characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available

Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	182 °C Open cup
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	39.45 mm²/s @ 40°C
Solubility	:	insoluble in water.
Log Kow	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	0.985 g/cm³ @ 15°C
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	:	Not applicable

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

No flames, no sparks. Eliminate all sources of ignition. Refer to Section 10 on Incompatible Materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

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

Acute toxicity (oral)	:	Based on available data, the classification criteria are not met
Acute toxicity (dermal)	:	Based on available data, the classification criteria are not met
Acute toxicity (inhalation)	:	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

ND-OIL12	
Viscosity, kinematic	39.45 mm²/s @ 40°C

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Component	
tris(nonylphenyl) phosphite(26523-78-4)	The substance is identified for having endocrine disrupting properties but there is no additional data available

11.2.2. Other information

Potential adverse human health effects and symptoms	:	Occupational exposure to the substance or mixture may cause adverse effects

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)	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, long–term (chronic)	:	Toxic to aquatic life with long lasting effects.

decyloxirane (2855-19-8)	
EC50 - Crustacea [1]	0.171 OECD Guideline 202
EC50 72h - Algae [1]	0.056 mg/l OECD 201

dodecyloxirane (3234-28-4)	
EC50 72h - Algae [1]	0.002 mg/l Pseudokirchneriella subspicata (OECD)
NOEC chronic algae	0.002 mg/l Pseudokirchneriella subcapitata

tris(nonylphenyl) phosphite (26523-78-4)	
LC50 - Fish [1]	100 mg/l
EC50 - Crustacea [1]	0.3 mg/l (OECD 202 method)
EC50 72h - Algae [1]	> 100 mg/l
NOEC chronic crustacea	> 0.1 mg/l (OECD 211 method)
NOEC chronic algae	100 mg/l (OECD 201 method)

2,6-di-tert-butyl-p-cresol (128-37-0)	
EC50 - Crustacea [1]	1.44 ml/l Not rapidly degradable
NOEC chronic fish	0.053 mg/l (OECD 210 method)
NOEC chronic crustacea	0.096 mg/l (OECD 211 method)
LC0, Fish, algae, acute	0.31 g/l

Tris(methylphenyl) phosphate (1330-78-5)	
LC50 - Fish [1]	0.21 – 0.32 Oncorhynchus mykiss (Rainbow trout)

12.2. Persistence and degradability

decyloxirane (2855-19-8)

Biodegradation	60 – 70 % 28 d (OECD 301 B)

dodecyloxirane (3234-28-4)

Biodegradation	60 – 70 % (OECD 301 B)

12.3. Bioaccumulative potential

decyloxirane (2855-19-8)

Log Pow	5.9 @ 25 °C

dodecyloxirane (3234-28-4)

Log Kow	5.77 @ 25 °C

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

Log Kow	5.11

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

ND-OIL12

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. Endocrine disrupting properties

Component

tris(nonylphenyl) phosphite(26523-78-4)	The substance is identified for having endocrine disrupting properties but there is no additional data available

12.7. 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

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 : Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR) : UN 3082

UN-No. (IMDG) : UN 3082

UN-No. (IATA) : UN 3082

UN-No. (ADN) : UN 3082

UN-No. (RID) : UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Decyloxirane ; Dodecyloxirane)
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Decyloxirane ; Dodecyloxirane)
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s. (Decyloxirane ; Dodecyloxirane)
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Decyloxirane ; Dodecyloxirane)
Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Decyloxirane ; Dodecyloxirane)

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, 601, 375
Limited quantities (ADR) : 5l
Packing instructions (ADR) : P001, IBC03, LP01, R001
Hazard identification number (Kemler No.) : 90
Tunnel restriction code (ADR) : -

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. Maritime transport in bulk according to IMO instruments

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

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	ND-OIL12 ; decyloxirane ; dodecyloxirane ; tris(nonylphenyl) phosphite ; Hexadec-1-ene ; Tris(methylphenyl) phosphate
3(c)	ND-OIL12 ; decyloxirane ; dodecyloxirane ; tris(nonylphenyl) phosphite ; 2,6-di-tert-butyl-p-cresol ; Tris(methylphenyl) phosphate

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: tris(nonylphenyl) phosphite (EC 701-028-2, CAS 26523-78-4)
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

VOC content : Not applicable
Other information, restriction and prohibition regulations : 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. 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. For details, refer to section 3 and 8.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100	200

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

ANNEX II. Article 59(10) of the REACH Regulation.

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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
SDS	Safety Data Sheet
OEL	Occupational Exposure Limit
RRN	REACH Registration no.
CAO	Cargo Aircraft Only

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
Asp. Tox. 1	Aspiration hazard, Category 1
EUH205	Contains epoxy constituents. May produce an allergic reaction.
H304	May be fatal if swallowed and enters airways.
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.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

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.