A/C COMPRESSOR OIL DE-12



according to Regulation (EU) 2015/830



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VERSION: 3.0

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

1.1. Product identifier

Trade name A/C Compressor Oil DE-12 **Product code** Ford Internal Ref.: 194645

SDS Number 6138

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 Distributor

Ford-Werke GmbH Ford Motor Company Ltd.
Edsel-Ford-Str. 2-14 Parts Distribution Centre
50769 Cologne Royal Oak Way South

Germany NN11 8NT Daventry, Northants

+49 221 90-33333 United Kingdom sdseu@ford.com +44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH - 24/7)

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 Hazardous to the aquatic environment — H400 Very toxic to aquatic life.

hazards Acute Hazard, Category 1

Hazardous to the aquatic environment — H411 Toxic to aquatic life with long lasting effects.

Chronic Hazard, Category 2

2.2. Label elements

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

Hazard pictograms



Signal word Warning

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

tris(nonylphenyl) phosphite; 1-H benzotriazole-1-methanamine, N,N-bis(2-

ethylhexyl)-methyl-

Hazard statements

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261 Avoid breathing mist, spray, vapours.
P273 Avoid release to the environment.

P280 Wear protective gloves.

Response

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.

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- ethanediyl)], .alpha methylomegamethoxy-	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	
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)	
Tris(methylphenyl) phosphate	1330-78-5 809-930-9 01-2119531335-46- XXXX	0,1 - < 1	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	

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
1-H benzotriazole-1- methanamine, N,N-bis(2- ethylhexyl)-methyl-	94270-86-7 619-007-0	0,1 - < 0,5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	

M: M-Factor

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. Call a physician

if symptoms develop or persist.

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.

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. 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.

5. 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 combustion products During fire, gases hazardous to health may be formed. Carbon oxides (CO,

CO2).

5.3. Advice for firefighters

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.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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.

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.

Avoid release to the environment. Avoid discharge into drains, water courses or 6.2. **Environmental precautions**

onto the ground. Prevent further leakage or spillage if safe to do so. Very toxic to

aguatic life. Toxic to aguatic 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.

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**

Reference to other sections

7.1. Precautions for safe handling

Precautions for safe handling

Hygiene measures

6.4.

Ensure good ventilation of the work station. Wear personal protective equipment.

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

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

8. **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

United Kingdom

Regulation	Substance	Туре	Value
EH40. HSE	2,6-di-tert-butyl-p-cresol (128-37-0) 2,6-Di-tert-butyl-p-cresol	WEL TWA	10 mg/m³

DNEL: Derived no effect level

No data available

Components	Туре	Route	Value	Form
decyloxirane (2855-19-8)	Worker Consumer	Dermal Inhalation Oral Inhalation	10.4 mg/kg bodyweight/day 36.7 mg/m³ 6.25 mg/kg bodyweight/day 10.9 mg/m³	Long-term - systemic effects Long-term - systemic effects Long-term - systemic effects Long-term - systemic effects

		Dermal	6.25 mg/kg bodyweight/day	Long-term - systemic effects
dodecyloxirane (3234-28-4)	Worker	Dermal	10.4 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	36.7 mg/m³	Long-term - systemic effects
	Consumer	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	Long-term - systemic effects
tris(nonylphenyl) phosphite	Worker	Dermal	16.7 mg/kg bodyweight/day	Long-term - systemic effects
(26523-78-4)		Inhalation	23.6 mg/m³	Long-term - systemic effects
	Consumer	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	Long-term - systemic effects
2,6-di-tert-butyl-p-cresol	Worker	Dermal	0.5 mg/kg bodyweight/day	Long-term - systemic effects
(128-37-0)		Inhalation	3.5 mg/m³	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
		Dermal	0.25 mg/kg bodyweight/day	Long-term - systemic effects
Tris(methylphenyl)	Worker	Dermal	0.41 mg/kg bodyweight/day	Long-term - systemic effects
phosphate (1330-78-5)		Inhalation	0.18 mg/m³	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
		Dermal	0.15 mg/kg bodyweight/day	Long-term - systemic effects
PNEC: Predicted no effect No data available	concentration			
Components	Туре	Route	Value	Form
Components decyloxirane (2855-19-8)	Type Not applicable	Route Freshwater	Value 0.171 μg/L	Form
				Form
		Freshwater	0.171 µg/L	Form Intermittent release
		Freshwater Seawater	0.171 µg/L 0.017 µg/L	
		Freshwater Seawater Freshwater	0.171 μg/L 0.017 μg/L 1.71 μg/L	
decyloxirane (2855-19-8)	Not applicable	Freshwater Seawater Freshwater STP	0.171 μg/L 0.017 μg/L 1.71 μg/L 3.6 mg/l	
decyloxirane (2855-19-8)	Not applicable	Freshwater Seawater Freshwater STP	0.171 μg/L 0.017 μg/L 1.71 μg/L 3.6 mg/l 0.002 μg/L	
decyloxirane (2855-19-8)	Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L	Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L	Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4)	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l	Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l	Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L	Intermittent release Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable Not applicable	Freshwater Seawater STP Freshwater Seawater Freshwater STP Freshwater STP Freshwater Freshwater Freshwater Freshwater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l	Intermittent release Intermittent release Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater STP Freshwater Seawater Freshwater Seawater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt	Intermittent release Intermittent release Intermittent release Freshwater
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater Seawater Freshwater Seawater Freshwater sediment sediment	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg dwt	Intermittent release Intermittent release Intermittent release Freshwater Seawater
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater Seawater Freshwater Seawater Freshwater Sediment Sediment Oral	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg food	Intermittent release Intermittent release Intermittent release Freshwater Seawater
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater Seawater Freshwater Sediment Sediment Oral STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg food 1.8 mg/l	Intermittent release Intermittent release Intermittent release Freshwater Seawater
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater Seawater Freshwater Seawater Freshwater Sediment Oral STP Freshwater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg food 1.8 mg/l 0.199 µg/L	Intermittent release Intermittent release Intermittent release Freshwater Seawater
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater Sediment Sediment Oral STP Freshwater Seawater	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg dwt 37 mg/kg food 1.8 mg/l 0.199 µg/L 0.02 µg/L 1.99 mg/l 99.6 µg/kg dw	Intermittent release Intermittent release Intermittent release Freshwater Seawater Secondary Poisoning
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater sediment Oral STP Freshwater Seawater Freshwater sediment Oral STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg food 1.8 mg/l 0.199 µg/L 1.99 mg/l	Intermittent release Intermittent release Freshwater Seawater Secondary Poisoning Intermittent release
decyloxirane (2855-19-8) dodecyloxirane (3234-28-4) tris(nonylphenyl) phosphite (26523-78-4)	Not applicable Not applicable Not applicable	Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater STP Freshwater Seawater Freshwater sediment Oral STP Freshwater Seawater Freshwater sediment Oral STP	0.171 µg/L 0.017 µg/L 1.71 µg/L 3.6 mg/l 0.002 µg/L 0 µg/L 0.024 µg/L 2.61 mg/l 50 µg/L 50 µg/L 50 mg/l 0.15 mg/kg dwt 0.15 mg/kg dwt 37 mg/kg food 1.8 mg/l 0.199 µg/L 0.02 µg/L 1.99 mg/l 99.6 µg/kg dw	Intermittent release Intermittent release Freshwater Seawater Secondary Poisoning Intermittent release Freshwater

		Oral STP	8.33 mg 0.17 mg	•	Secondary Pois	soning
Hexadec-1-ene (629-73	-2) Not applicable	Freshwater Seawater Freshwater sediment sediment		g/l	Intermittent rele Freshwater Seawater	ease
		Soil	85.3 mg	• •	ocawator	
Tris(methylphenyl) phosphate (1330-78-5)	Not applicable	Freshwater Freshwater	0.001 m 0.001 m	•	Intermittent rele	ease
		sediment sediment	2.05 mg 0.205 m	/kg dwt g/kg dwt	Freshwater Seawater	
		Soil Oral STP	1.01 mg 0.65 mg 100 mg/	/kg food	Secondary Pois	soning
Exposure controls						
Appropriate engineeri		Ventilation ra enclosures, lo airborne level been establis	tes should ocal exhau Is below re hed, main	be matched to cond st ventilation, or othe commended exposu tain airborne levels to	inges per hour) should bittons. If applicable, use per engineering controls to re limits. If exposure limits an acceptable level	orocess maintain ts have not
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				
Individual protection r	neasures, such as pe	-		, ,		
Eye protection		EN 166. Safe	ty glasses	with side shields		
Skin protection						
Hand protection		product and mechanical s	the stated strain, whic	application. Special	ation is only valid for the working conditions, like h est conditions, can reduced ded glove	eat or
Material	Permeation	Thickness (r	nm)	Comments		
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4		EN ISO 374		
				Glove recommenda	tion: Camatril Velours® 7	730 (Kächele-

protective effect provided by the recommended glove					
Material	Permeation	Thickness (mm)	Comments		
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	EN ISO 374		
, , ,			Glove recommendation: Camatril Velours® 730 (Kächele- Cama GmbH, source of supply see www.kcl.de) or comparable product.		
In case of splash	6 (> 480 minutes)	0,4	EN ISO 374		
contact: Nitrile rubber (NBR)			Glove recommendation: Camatril Velours® 730 (Kächele- Cama GmbH, source of supply see www.kcl.de) or comparable product.		
Other protective I	measures	Wear suitable protective clothing.			
Respiratory protection		Not normally needed. In case of insufficient ventilation, wear suitable respiratory equipment. Filter type: A-P2			
Skin and body protec	tion	No additional information available.			
Thermal hazard prote	ction	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.			
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.			

SECTION 9: Physical and chemical properties 9.

8.2.

Information on basic physical and chemical properties 9.1.

Liquid Physical state

Appearance Clear.

Colour light yellow.

Odour Characteristic.

Odour threshold No data available pH No data available Relative evaporation rate (butylacetate=1) No data available Melting point No data available

Pour point -40 °C

No data available Freezing point **Boiling point** No data available Flash point 182 °C Open cup **Auto-ignition temperature** No data available **Decomposition temperature** No data available Flammability (solid, gas) No data available No data available Vapour pressure No data available Relative vapour density at 20 °C Relative density No data available 0.985 g/cm3 @ 15°C Density Solubility insoluble in water. Log Pow No data available 39.45 mm²/s @ 40°C Viscosity, kinematic 9.079 mm²/s @ 100°C

Viscosity, dynamicNo data availableExplosive propertiesNo data availableOxidising propertiesNo data availableExplosive limitsNo data available

9.2. Other information

VOC (EU) Not applicable

10. 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.

should not be produced.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicityBased on available data, the classification criteria are not met.Skin corrosion/irritationBased on available data, the classification criteria are not met.Serious eye damage/irritationBased 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 Potential adverse human health effects Occupational exposure to the substance or mixture may cause adverse effects.

12. **SECTION 12: Ecological information**

12.1. Toxicity

and symptoms

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

Hazardous to the ad	uatic environment	short-term	(acute)

Substance / Product	Trophic level	Species	Туре	Value	Duration	Remarks
decyloxirane (2855-19- 8)	algae	Pseudokirc hnerella subcapitat a	EC50	0.056 mg/l	72 hours	(OECD 201 method)
	crustacea	Daphnia magna	EC50	0.171 mg/l	48 hours	(OECD 202 method)
dodecyloxirane (3234- 28-4)	algae	Pseudokirc hnerella subcapitat a	EC50	0.002 mg/l	72 hours	(OECD 201 method)
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	
2,6-di-tert-butyl-p-cresol (128-37-0)	crustacea	Daphnia magna	EC50	0.48 mg/l	48 hours	
	Fish	Danio rerio	LC0	> 0.5 mg/l	96 hours	
Tris(methylphenyl) phosphate (1330-78-5)	Fish	Oncorhync hus mykiss (Rainbow trout)	LC50	0.6 mg/l	96 hours	
	aquatic invertebrates	Daphnia magna	EC50	146 µg/L	48 h	
Hazardous to the aquat	tic environment, l	ong-term (chr	onic)			
Substance / Product	Trophic level	Species	Type	Value [Ouration	Remarks

			g (e	••,			
Substanc	e / Product	Trophic level	Species	Type	Value	Duration	Remarks
dodecylox 28-4)	irane (3234-	algae	Pseudokirc hnerella subcapitat a	NOEC	0.002 mg/l	72 hours	
Tris(methy phosphate	rlphenyl) (1330-78-5)	aquatic invertebrates	Daphnia magna	NOEC	0,1 mg/L	21 d	

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

A/C Compressor Oil DE-12

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.

Component

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

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

European List of Waste (LoW) code

Dispose in accordance with all applicable regulations.

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 / RID / IMDG / IATA / ADN

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.

(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) 51

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)

Packing instructions (IMDG) P001, LP01 EmS-No. (Fire) F-A EmS-No. (Spillage) S-F Stowage category (IMDG) Α

Air transport

E1 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) Y964 PCA limited quantity max net quantity 30kgG

(IATA)

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 I Carriage permitted (ADN) Τ

Rail transport

EU-Regulations

Classification code (RID) M6

Special provisions (RID) 274, 335, 375, 601

Limited quantities (RID) 5L

P001, IBC03, LP01, R001 Packing instructions (RID)

Hazard identification number (RID)

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

IBC code Not applicable.

15. **SECTION 15: Regulatory information**

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

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

decyloxirane; dodecyloxirane; tris(nonylphenyl) phosphite; Tris(methylphenyl) phosphate; 1-H benzotriazole-1-methanamine, N,N-bis(2ethylhexyl)-methyl-

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

decyloxirane; dodecyloxirane;

tris(nonylphenyl) phosphite; 2,6-di-tert-butylp-cresol; Tris(methylphenyl) phosphate; 1-H benzotriazole-1-methanamine, N,N-bis(23(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

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard

ethylhexyl)-methyltris(nonylphenyl) phosphite

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

Contains no substance on the REACH candidate list

VOC (EU) 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.

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

Seveso Information National regulations

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.

EINECS

Abbreviations and acronyms

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

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 PC (Chemical product category)

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

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

 Skin Sens. 1
 H317

 Aquatic Acute 1
 H400

 Aquatic Chronic 2
 H411

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..

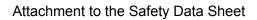
EUH205 Contains epoxy constituents. May produce an allergic reaction..

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.





Product Name: A/C Compressor Oil DE-12

Ford Int. Ref. No.: 194645 REVISION DATE: 27.01.2020

Involved Products:

Finiscode Part number Container Size:

. 1 1 940 124 FU7J M2C300 AA 250 ml