

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment
Regulation (EU) 2015/830 Date of issue: 17-5-2018 Revision date: 3-1-2019
Supersedes: 17-5-2018 Version: 1.1

AREOL
PREMIUM QUALITY.
SMART PRICE

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

Product identifier

Product form: Mixture

Trade name: AREOL ECO Protect C-4 5W-30

Product code: 5W30AR123, 5W30AR124, 5W30AR125

Type of product: Lubricants

Product group: Trade product

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

Relevant identified uses

Main use category: Industrial use, Professional use, Consumer use

Use of the substance/mixture: Engine oil

Uses advised against

No additional information available

Details of the supplier of the safety data sheet

ATH&S GmbH

Bronninghauser Str. 33

33729 Bielefeld

Deutschland

www.areollub.com

Emergency telephone number

Country Organisation: United Kingdom

Company: National Poisons Information Service

(Cardiff Centre) Gwenwyn Ward, Llandough Hospital

Address: Penarth, CF64 2XX Cardiff

Emergency number: 0344 892 0111



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HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects:

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements:

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

EUH-statements: EUH210 - Safety data sheet available on request.

2.3. Other hazards:

No additional information available

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COMPOSITION/INFORMATION ON INGREDIENTS

Substances: Not applicable

Mixtures

Comments: Highly refined mineral oils and additives.

NAME	PRODUCT IDENTIFIER	%	CLASSIFICATION ACCORDING TO REGULATION (EC) NO. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic	(CAS №) 64742-54-7 (EC №) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-No) 01-2119484627-25	50-80	Asp. Tox. 1, H304
Mineral oil *		2,5-10	Asp. Tox. 1, H304
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert- butyl-4-hydroxyphenyl) propionate	(CAS-No.) 125643-61-0 (EC-No.) 406-040-9 (EC Index-No.) 607-530-00-7 (REACH-no) 01-0000015551-76	0,1 - 2,5	Aquatic Chronic 4, H413
bis(nonylphenyl)amine	(CAS №) 36878-20-3 (EC №) 253-249-4 (REACH-No) 01-2119488911-28	1-5	Aquatic Chronic 4, H413

Comments:

* contains one or more of the following CAS-numbers (REACH registration numbers):
64741-88-4 (01-2119488706-23), 64741-89-5 (01-2119487067-30), 64741-95-3 (01-2119487081-40), 64741-96-4 (01-2119483621-38), 64741-97-5 (01-2119480374-36), 64742-01-4 (01-2119488707-21), 64742-52-5 (01-2119467170-45), 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-57-0 (01-2119489287-22), 64742-62-7 (01-2119480472-38), 64742-65-0 (01-2119471299-27), 64742-71-8 (01-2119485040-48), 72623-85-9 (01-2119555262-43), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 74869-22-0 (01-2119495601-36)

The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Full text of H-statements: see section 16

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4 FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion: Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects: No additional information available. Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after ingestion: May result in aspiration into the lungs, causing chemical pneumonia.

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

Treat symptomatically.

5 FIREFIGHTING MEASURES

5.1. Extinguishing media

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

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Combustible liquid.

Hazardous decomposition products in case of fire: Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: Ventilate spillage area.

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling: Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: : Keep container closed when not in use.

Keep in a cool, well-ventilated place away from heat.

Storage temperature: 0 - 40 °C

7.3. Specific end use(s)

No additional information available

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EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

EU	Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended: 5 mg/m ³ - ACGIH TLV (inhalable fraction).
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8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Materials for protective clothing: Wear suitable protective clothing

Hand protection: Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes), 6 (> 480 minutes)	>=0,35		EN 374

Eye protection: Safety glasses

Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

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PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: light brown.

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: -39 °C - ASTM D5950 (pour point)

Boiling point: No data available

Flash point: 216 °C - ASTM D92 (COC)

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: 0,849 kg/l (15 °C) - ASTM D4052

Solubility: Water : Practically not miscible.

Log Pow: No data available

Viscosity, kinematic: 72,8 mm²/s (40 °C) - ASTM D7279

Viscosity, dynamic: No data available

Explosive properties: Presents no particular fire or explosion hazard.

Oxidising properties: No data available

Explosive limits: No data available

9.2. Other information: VOC content: 0 %

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BILITY AND REACTIVITY**Trade name**
AREOL ECO Protect C-4 5W-30

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

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Reacts violently with (strong) oxidizers.

Conditions to avoid: None under recommended storage and handling conditions (see section 7).

Incompatible materials: No additional information available

Hazardous decomposition products: No decomposition if stored normally.

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TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LD50 oral rat	> 5000 mg/kg (OECD 420 method)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LC50 inhalation rat (mg/l)	> 5,53 mg/l/4h (mg/L air, aerosol) (OECD 403 method)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)

bis(nonylphenyl)amine (36878-20-3)

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

Trade name
AREOL ECO Protect C-4 5W-30**AREOL ECO Protect C-4 5W-30**

Viscosity, kinematic

72,8 mm²/s (40 °C) - ASTM D7279**12 ECOLOGICAL INFORMATION****12.1. Toxicity****Ecology - general:** The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.**Acute aquatic toxicity:** Not classified**Chronic aquatic toxicity:** Not classified**Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)**

LC50 fish 1	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 Daphnia 1	> 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)
EC50 Daphnia 2	> 10000 mg/l (Daphnia magna, 48h) (OECD 202 method)
NOEC (acute)	>= 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
NOEC chronic fish	>= 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox, 14/28d)
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)

bis(nonylphenyl)amine (36878-20-3)

LC50 fish 1	> 100 mg/l Brachydanio rerio (zebra-fish)
EC50 Daphnia 1	> 100 mg/l (OECD 202 method)
EC50 72h algae (1)	600 mg/l
EC50 96h algae (1)	870 mg/l

Mineral oil *

LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 10000 mg/l
EC50 72h algae (1)	> 100 mg/l

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reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LC50 fish 1	> 100 mg/l (Oncorhynchus mykiss, 14d) (OECD 204 method)
LC50 other aquatic organisms 1	> 74 mg/l Danio rerio (zebra fish), 96h
EC50 Daphnia 1	> 100 mg/l (Daphnia magna, 48h) (OECD 202 method)
EC50 72h algae (1)	> 3 mg/l (Desmodesmus subspicatus, 72h) (OECD 201 method)
NOEC (acute)	>= 3 mg/l (Desmodesmus subspicatus, 72h) (OECD 201 method)
NOEC chronic fish	>= 0,001 mg/l (Danio rerio, 36d) (OECD 210 method)
NOEC chronic crustacea	>= 1 mg/l (Daphnia magna, 21d) (OECD 211 method)

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Biodegradation	31 % (28d) (OECD 301F method)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Persistence and degradability	Not readily biodegradable.

bis(nonylphenyl)amine (36878-20-3)	
Biodegradation	1 % (test concentration 20,1 mg/l)

12.3. Bioaccumulative potential:

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Bioconcentration factor (BCF REACH)	260 (Oncorhynchus mykiss, 35d) (OECD 305 method)
Log Pow	9,2

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12.4. Mobility in soil:

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

Ecology - soil

Product adsorbs little onto the soil.

12.5. Results of PBT and vPvB assessment:

Component

reaction mass of isomers of:
C7-9-alkyl 3-(3,5-di-tert-butyl-
4-hydroxyphenyl)propionate
(125643-61-0)

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:

No additional information available

13 DISPOSAL CONSIDERATIONS

Waste treatment methods:

Do not allow into drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations:

Dispose in a safe manner in accordance with local/national regulations.

European List of Waste (LoW) code:

13 02 05*- mineral-based non-chlorinated engine, gear and lubricating oils

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TRANSPORT INFORMATION

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

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ADR	IMDG	IATA	AND	RID
UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

Special precautions for user

Overland transport: Not applicable

Transport by sea: Not applicable

Air transport: Not applicable

Inland waterway transport: Not applicable

Rail transport: Not applicable

Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

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REGULATORY INFORMATION**Trade name**
AREOL ECO Protect C-4 5W-30

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:

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

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4- hydroxyphenyl)propionate - bis(nonylphenyl)amine

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

Distillates (petroleum), hydrotreated heavy paraffinic - Mineral oil *

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

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4- hydroxyphenyl)propionate - bis(nonylphenyl)amine

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content:0 %

National regulations

No additional information available

Chemical safety assessment

No chemical safety assessment has been carried out

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16 OTHER INFORMATION

Trade name
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Indication of changes:

Section	Changed item	Change	Comments
	Revision date	Added	
	Date of issue	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after ingestion	Modified	
5.2	Hazardous decomposition products in case of fire	Modified	
10.3	Possibility of hazardous reactions	Modified	

Abbreviations and acronyms:

AND	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

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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
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways.
H413	May cause long lasting harmful effects to aquatic life.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product