

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 22-5-2018. Revision date: 5-11-2018. Supersedes: 8-6-2018. Version: 2.1

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 Energy DX1 0W-20

Product code: OW20AR066, OW20AR067, OW20AR068

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



Trade name
ECO Energy DX1 0W-20

2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Mixtures/Substances:

SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

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

Trade name
ECO Energy DX1 0W-20

3 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 N ^o) 64742-54-7 (EC N ^o) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-No) 01-2119484627-25	50-80	Asp. Tox. 1, H304
Mineral oil *		5-10	Asp. Tox. 1, H304
Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolyisobutenyl derivs	(CAS N ^o) 147880-09-9 (EC N ^o) 604-611-9	1-2,5	Aquatic Chronic 4, H413
bis(nonylphenyl)amine	(CAS N ^o) 36878-20-3 (EC N ^o) 253-249-4 (REACH-No) 01-2119488911-28	0,1-2,5	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

Trade name
ECO Energy DX1 0W-20

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: Call a poison center or a doctor if you feel unwell. Do not induce vomiting.

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

Symptoms/effects: 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.

Trade name
ECO Energy DX1 0W-20

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

Trade name
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8 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	3 (> 0.65)	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.

Trade name
ECO Energy DX1 0W-20

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: 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: 222 °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: 0,843 kg/l (15 °C) - ASTM D4052

Solubility: Water : Practically not miscible.

Log Pow: No data available

Viscosity, kinematic: 44 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 %

10 **BILITY AND REACTIVITY**

Trade name
ECO Energy DX1 0W-20

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.

11 **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)

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

ECO Energy DX1 0W-20

Viscosity, kinematic

44 mm²/s (40 °C) - ASTM D7279

Trade name
ECO Energy DX1 0W-20

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

Trade name
ECO Energy DX1 0W-20

12.2. Persistence and degradability

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

Biodegradation

31 % (28d) (OECD 301F method)

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

Biodegradation

1 % (test concentration 20,1 mg/l)

12.3. Bioaccumulative potential:

No additional information available

12.4. Mobility in soil:

No additional information available

12.5. Results of PBT and vPvB assessment:

No additional information available

12.6. Other adverse effects:

No additional information available

13 DISPOSAL CONSIDERATIONS

Waste treatment methods:

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*

14

TRANSPORT INFORMATION

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

Trade name
ECO Energy DX1 0W-20

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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15 REGULATORY INFORMATION

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	Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolyisobutenyl derivs -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	Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolyisobutenyl derivs - bis(nonylphenyl)amine

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC content:0 %
Directive 2012/18/EU (SEVESO III)

National regulations
No additional information available

Chemical safety assessment
No chemical safety assessment has been carried out

16 OTHER INFORMATION

Trade name
ECO Energy DX1 0W-20

Indication of changes:

Section	Changed item	Change	Comments
3	Composition/information on ingredients	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
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic

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PREMIUM QUALITY.
SMART PRICE

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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