Safety Data Sheet
DIESEL ANTI-FREEZE

Safety Data Sheet dated 4/7/2019, version 9

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

1.1. Product identifier

Mixture identification:

Trade name: DIESEL ANTI-FREEZE

Trade code: 34037

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

Recommended use:

Fuel additive

1.3. Details of the supplier of the safety data sheet

Supplier:

Arexons S.p.A.

via Antica di Cassano, 23, 20063

Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Centro Antiveleni di Pavia IRCCS- Fondazione Maugeri tel. +39 (0)382 24444 (h24; it, en)

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: Beaumont Hospital - National Poisons Information Centre 01 809 2166 (7days, 8:00 - 22:00)

In South Africa: Poison Information Helpline 0861 555 777

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, STOT SE 3, May cause drowsiness or dizziness.

Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.

Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER.
P331 Do NOT induce vomiting.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.
PACK1 The packing must be featured by a safety lock for children.
PACK2 The packing must have tactive indications of danger for blind people.

Contains

Solvent naphtha (petroleum), heavy arom.
Distillates (petroleum), hydrotreated light

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 50% - < 60% Distillates (petroleum), hydrotreated light

REACH No.: 01-2119456620-43, Index number: 649-422-00-2, CAS: 64742-47-8, EC: 926-141-6
3.10/1 Asp. Tox. 1 H304
EUH066

>= 30% - < 40% Solvent naphtha (petroleum), heavy arom.

REACH No.: 01-2119463583-34, Index number: 649-424-00-3, CAS: 64742-94-5, EC: 265-198-5
3.10/1 Asp. Tox. 1 H304
3.8/3 STOT SE 3 H336
4.1/C2 Aquatic Chronic 2 H411
EUH066

>= 1% - < 2% 1,2,4-trimethylbenzene

Index number: 601-043-00-3, CAS: 95-63-6, EC: 202-436-9
2.6/3 Flam. Liq. 3 H226
3.1/4/Inhal Acute Tox. 4 H332
3.2/2 Skin Irrit. 2 H315
3.3/2 Eye Irrit. 2 H319
3.8/3 STOT SE 3 H335
4.1/C2 Aquatic Chronic 2 H411

>= 0.1% - < 0.25% naphthalene

Index number: 601-052-00-2, CAS: 91-20-3, EC: 202-049-5
3.1/4/Oral Acute Tox. 4 H302
3.6/2 Carc. 2 H351
4.1/A1 Aquatic Acute 1 H400 M=1.
4.1/C1 Aquatic Chronic 1 H410 M=1.

>= 0.1% - < 0.25% 2-ETHYLHEXANOIC ACID
REACH No.: 01-2119488942-23, Index number: 607-230-00-6, CAS: 149-57-5, EC: 205-743-6
3.7/2 Repr. 2 H361d

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:
To carbon dioxide.
To dust.
Foam
Water spray.
Not Recommended Extinguishing Media:
Do not use direct water jets.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
Wash with plenty of water.

6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
1,2,4-trimethylbenzene - CAS: 95-63-6
EU - TWA(8h): 100 mg/m3, 20 ppm
naphthalene - CAS: 91-20-3
EU - TWA(8h): 50 mg/m3, 10 ppm
ACGIH - TWA(8h): 10 ppm - Notes: Skin, A3 - URT irr, cataracts, hemolytic anemia
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
ACGIH - TWA(8h): 5 mg/m3 - Notes: (IFV) - Teratogenic eff

DNEL Exposure Limit Values
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
Worker Professional: 2 mg/kg - Consumer: 1 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 14 mg/m3 - Consumer: 3.5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
Target: Fresh Water - Value: 0.36 mg/l
Target: Marine water - Value: 0.03 mg/l
Target: Freshwater sediments - Value: 6.37 mg/kg
Target: Marine water sediments - Value: 0.63 mg/kg
Target: 09 - Value: 71.7 mg/l

8.2. Exposure controls
Eye protection:
Eye glasses with side protection.
Compliant with EN 166
Protection for skin:
protective clothing
Protection for hands:
Nitrile or Viton gloves.

Compliant with EN 374.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid light yellow	--	--
Odour:	Characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	>61°C	IP 170	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	0.840 g/l (15°C)	07	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	>200°C	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	3 mm2/s	07	--

Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	**Value**	**Method:**	**Notes:**
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

NA=not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
None in particular.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the product:
DIESEL ANTI-FREEZE
a) acute toxicity

Based on available data, the classification criteria are not met
b) skin corrosion/irritation

Based on available data, the classification criteria are not met
c) serious eye damage/irritation

Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation

Based on available data, the classification criteria are not met
e) germ cell mutagenicity

Based on available data, the classification criteria are not met
f) carcinogenicity

Based on available data, the classification criteria are not met
g) reproductive toxicity

Based on available data, the classification criteria are not met
h) STOT-single exposure
The product is classified: STOT SE 3 H336
i) STOT-repeated exposure

Based on available data, the classification criteria are not met
j) aspiration hazard
The product is classified: Asp. Tox. 1 H304
Toxicological information of the main substances found in the product:
Distillates (petroleum), hydrotreated light - CAS: 64742-47-8
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m3 - Duration: 8h
Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
b) skin corrosion/irritation:
Test: OECD TG 404 - Route: Skin Negative
c) serious eye damage/irritation:
Test: OECD TG 405 - Route: EYE Negative
d) respiratory or skin sensitisation:
Test: Inhalation Sesitization 3
Test: Skin Sensitization 3
j) aspiration hazard:
Test: May be fatal if swallowed and enters airways (physical-chemical properties) - Route: Oral Positive
Solvent naphtha (petroleum), heavy arom. - CAS: 64742-94-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
1,2,4-trimethylbenzene - CAS: 95-63-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 5000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit 3160 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat 18000 mg/l - Duration: 4h
naphthalene - CAS: 91-20-3
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 500 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2500 mg/kg
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 2043 mg/kg
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
Test: LC0 - Route: Inhalation - Species: Rat = 0.11 mg/l - Duration: 8h

SECTION 12: Ecological information

12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
Distillates (petroleum), hydrotreated light - CAS: 64742-47-8
a) Aquatic acute toxicity:
Endpoint: EL0 - Species: Daphnia 1000 mg/l - Duration h: 48
Endpoint: EL0 - Species: Algae 1000 mg/l - Duration h: 72
Endpoint: CE7 - Species: Fish 1000 mg/l - Duration h: 96
Solvent naphtha (petroleum), heavy arom. - CAS: 64742-94-5
b) Aquatic chronic toxicity:
Endpoint: LC50 - Species: Fish 9.9 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia 9.9 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae 9.9 mg/l - Duration h: 72

1,2,4-trimethylbenzene - CAS: 95-63-6
b) Aquatic chronic toxicity:
Endpoint: LC50 - Species: Daphnia 6.14 mg/l - Duration h: 48
naphthalene - CAS: 91-20-3
b) Aquatic chronic toxicity:
Endpoint: LC50 - Species: Fish 0.51 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia 3.4 mg/l - Duration h: 48
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 302 mg/l - Duration h: 48
Endpoint: EC50 - Species: Daphnia = 85.4 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 49.3 mg/l - Duration h: 72

12.2. Persistence and degradability
None
2-ETHYLHEXANOIC ACID - CAS: 149-57-5
Test: OECD 302B - Duration: 6 days - %: 85-95

12.3. Bioaccumulative potential
N.A.

12.4. Mobility in soil
N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	3082
IATA-UN Number:	3082
IMDG-UN Number:	3082

14.2. UN proper shipping name

ADR-Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(naphthalene, Solvent naphtha (petroleum), heavy arom.)
ADR-Shipping Name:	DANGEROUS FOR ENVIRONMENT
IATA-Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(naphthalene, Solvent naphtha (petroleum), heavy arom.)
IMDG-Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(naphthalene, Solvent naphtha (petroleum), heavy arom.)

14.3. Transport hazard class(es)

ADR-Class:	9
ADR - Hazard identification number:	90
IATA-Class:	9
IATA-Label:	9
IMDG-Class:	9
Sea (IMO):	9

14.4. Packing group

ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III

14.5. Environmental hazards

ADR-Enviromental Pollutant:	Yes
IMDG-Marine pollutant:	Marine Pollutant

14.6. Special precautions for user

Rail (RID):	9
ADR-Subsidiary hazards:	-
ADR-S.P.:	274 335 375 601
ADR-Transport category (Tunnel restriction code):	3 (E)
IATA-Passenger Aircraft:	964
IATA-Subsidiary hazards:	-
IATA-Cargo Aircraft:	964
IATA-S.P.:	A97 A158 A197
IATA-ERG:	9L
IMDG-EmS:	F-A, S-F
IMDG-Subsidiary hazards:	-
IMDG-Stowage and handling:	Category A
IMDG-Segregation:	-

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

No
Limited Quantity: 5 L
Exempted Quantity: E1

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
Restriction 3
Restriction 40

Restrictions related to the substances contained:
No restriction.

Volatile Organic compounds - VOCs = 59.54 %
Volatile Organic compounds - VOCs = 595.40 g/Kg
Volatile Organic compounds - VOCs = 500.14 g/l

Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: E2

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:
None

SECTION 16: Other information

Text of phrases referred to under heading 3:
H304 May be fatal if swallowed and enters airways.
EUH066 Repeated exposure may cause skin dryness or cracking.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H302 Harmful if swallowed.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H361d Suspected of damaging the unborn child.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Carc. 2	3.6/2	Carcinogenicity, Category 2
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients
SECTION 7: Handling and storage
SECTION 14: Transport information

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

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NA:	Not applicable
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.