

## Safety Data Sheet dated 7/7/2019, version 3

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

1.1. Product identifier

Mixture identification:

Trade name: Starter motore diesel e benzina

Trade code: 9409

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

Recommended use:

Engine quick-start product

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):

- Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.
- Warning, STOT SE 3, May cause drowsiness or dizziness. Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H336 May cause drowsiness or dizziness.

H412 Harmful 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.



P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P271 Use only outdoors or in a well-ventilated area.

P405 Store locked up.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

diethyl ether

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

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

Restricted to professional users.

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:

>= 30% - < 40% Propano

REACH No.: 01-2119486944-21, Index number: 601-003-00-5, CAS: 74-98-6, EC: 200-827-9

♦ 2.2/1 Flam. Gas 1 H220

♦ 2.5 Press. Gas H280

>= 15% - < 20% diethyl ether

Index number: 603-022-00-4, CAS: 60-29-7, EC: 200-467-2

2.6/1 Flam. Liq. 1 H224

**♦** 3.8/3 STOT SE 3 H336

◆ 3.1/4/Oral Acute Tox. 4 H302

EUH019 EUH066

>= 15% - < 20% ethanol

Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6

♦ 2.6/2 Flam. Liq. 2 H225

>= 5% - < 7% Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

REACH No.: 01-2119666169-27, EC: 927-510-4

2.6/2 Flam. Liq. 2 H225

◆ 3.2/2 Skin Irrit. 2 H315

4.1/C2 Aquatic Chronic 2 H411

♦ 3.10/1 Asp. Tox. 1 H304

◆ 3.8/3 STOT SE 3 H336

>= 0.25% - < 0.5% propan-2-ol

REACH No.: 01-2119457558-25, Index number: 603-117-00-0, CAS: 67-63-0, EC: 200-661-7

♦ 2.6/2 Flam. Liq. 2 H225

◆ 3.3/2 Eye Irrit. 2 H319

◆ 3.8/3 STOT SE 3 H336



>= 0.1% - < 0.25% butanone

Index number: 606-002-00-3, CAS: 78-93-3, EC: 201-159-0

2.6/2 Flam. Liq. 2 H225
3.3/2 Eye Irrit. 2 H319
3.8/3 STOT SE 3 H336

EUH066

### **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 under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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.

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 all sources of ignition.

Remove persons to safety.

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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

Store in well-closed containers, preferably in a cool place, away from sources of heat and direct sunlight.

Avoid contact with eyes, skin and clothing. Wear protective clothing and goggles.

Do not store this material near food and drinks.

Only store in the original container.

Avoid exposure to direct sunlight.

Store at temperatures below 50°C/122°F.

Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight. Keep away from food, drink and feed.

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

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

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8.1. Control parameters
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Propano - CAS: 74-98-6
20101.13 - TWA: 1000 ppm
20101.14 - STEL: 1000 ppm
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ACGIH - Notes: (D, EX) - Asphyxia

diethyl ether - CAS: 60-29-7

EU - TWA(8h): 308 mg/m3, 100 ppm - STEL: 616 mg/m3, 200 ppm

ACGIH - TWA(8h): 400 ppm - STEL: 500 ppm - Notes: CNS impair, URT irr

ethanol - CAS: 64-17-5

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

EU - TWA: 1639.26 mg/m3, 400 ppm - STEL: 500 mg/m3, 2049.08 ppm

propan-2-ol - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS

impair

butanone - CAS: 78-93-3



EU - TWA(8h): 600 mg/m3, 200 ppm - STEL: 900 mg/m3, 300 ppm ACGIH - TWA(8h): 200 ppm - STEL: 300 ppm - Notes: BEI - URT irr, CNS and PNS impair

**DNEL Exposure Limit Values** 

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Worker Professional: 300 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 2085 mg/l - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 149 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects butanone - CAS: 78-93-3

Worker Professional: 1161 mg/kg - Consumer: 412 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Worker Professional: 600 mg/l - Consumer: 106 mg/l - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects

Consumer: 31 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values butanone - CAS: 78-93-3

Target: Freshwater sediments - Value: 284.74 mg/kg Target: Marine water sediments - Value: 284.74 mg/kg

Target: Soil (agricultural) - Value: 22.5 mg/kg Target: Fresh Water - Value: 55.8 mg/l Target: Marine water - Value: 55.8 mg/l

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Compliant with EN 374.

cat. III

PVC (polyvinyl chloride).

Respiratory protection:

In case of insufficient ventilation, use adequate respiratory protection 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 in aerosol		
Odour:	etereo		
Odour threshold:	N.A.		
pH:	N.A.		
Melting point / freezing point:	N.A.		



Initial boiling point and boiling range:	N.A.		
Flash point:	<0°C		
Evaporation rate:	N.A.		
Solid/gas flammability:	N.A.		
Upper/lower flammability or explosive limits:	N.A.		
Vapour pressure:	6 bar		
Vapour density:	>2		
Relative density:	0.615-0.625 kg/l		
Solubility in water:	Insoluble	-	
Solubility in oil:	completa		
Partition coefficient (n-octanol/water):	N.A.		
Auto-ignition temperature:	>400°C (gas)		
Decomposition temperature:	N.A.		
Viscosity:	>2.05 mm2/s @40°C		
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		

## 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	parziale in H2C	)	
Fat Solubility:	completa		
Conductivity:	N.A.		
Substance Groups relevant properties	N.A.		

NA=not applicable

# SECTION 10: Stability and reactivity 10.1. Reactivity

Strong oxidising agents.



10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Excessive heat.

Flames and other sources of ignition.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Thermal decomposition may result in carbon monoxide, carbon dioxide and other unidentified organic compounds.

## **SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Toxicological information of the product:

Starter motore diesel e benzina

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

Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product:

diethyl ether - CAS: 60-29-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 2 1601 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 20 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 20000 mg/kg

ethanol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rabbit 6300 mg/kg

Test: LC50 - Route: Oral - Species: Rat 7060 mg/kg

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics



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a) acute toxicity:
      Test: LC50 - Route: Inhalation - Species: Rat > 23300 mg/m3 - Duration: 4h
      Test: LD50 - Route: Oral - Species: Rat > 5840 mg/kg
      Test: LD50 - Route: Skin - Species: Rat > 2920 mg/kg
propan-2-ol - CAS: 67-63-0
a) acute toxicity:
      Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
      Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
butanone - CAS: 78-93-3
a) acute toxicity:
      Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
      Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
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### **SECTION 12: Ecological information**

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Daphnia = 4 mg/l - Duration h: 48 Endpoint: EL50 - Species: Fish = 1.5 mg/l - Duration h: 24 propan-2-ol - CAS: 67-63-0

a) Aquatic acute toxicity:

Endpoint: EL50 - Species: Daphnia > 100 mg/l - Duration h: 48 Endpoint: EL50 - Species: Algae > 100 mg/l - Duration h: 72 Endpoint: EL50 - Species: Fish > 100 mg/l - Duration h: 48

butanone - CAS: 78-93-3 a) Aquatic acute toxicity:

Endpoint: EL50 - Species: Daphnia = 308 mg/l Endpoint: EL50 - Species: Algae = 2029 mg/l Endpoint: EC50 - Species: Fish = 2993 mg/l

12.2. Persistence and degradability

None

butanone - CAS: 78-93-3

Biodegradability: Not persistent and Biodegradable

12.3. Bioaccumulative potential

butanone - CAS: 78-93-3

Bioaccumulation: Not bioaccumulative

12.4. Mobility in soil

butanone - CAS: 78-93-3 Mobility in soil: Mobile

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.

Additional disposal information:

Reuse if possible. Act in accordance with the local and national laws in force.

### **SECTION 14: Transport information**





14.1. UN number

ADR-UN Number: 1950 IATA-UN Number: 1950 IMDG-UN Number: 1950

14.2. UN proper shipping name

ADR-Shipping Name: AEROSOLS, flammable IMDG-Shipping Name: AEROSOLS, flammable AEROSOLS, flammable

14.3. Transport hazard class(es)

ADR-Class: 2
ADR - Hazard identification number:

IATA-Class: 2 IATA-Label: 2.1 IMDG-Class: 2

14.4. Packing group

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

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary hazards: See SP63 ADR-S.P.: 190 327 344 625 ADR-Transport category (Tunnel restriction code): 2 (D)

IATA-Passenger Aircraft: 203 IATA-Subsidiary hazards: See SP63 IATA-Cargo Aircraft: 203

IATA-S.P.: A145 A167 A802

IATA-ERG: 10L
IMDG-EmS: F-D,
S-U

IMDG-Subsidiary hazards: See SP63 IMDG-Stowage and handling: SW1 SW22 IMDG-Segregation: SG69

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

No

Limited Quantity: 1 L Exempted Quantity: E0

## **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:

Restriction 29

Volatile Organic compounds - VOCs = 100.00 % Volatile Organic compounds - VOCs = 1000.00 g/Kg Volatile Organic compounds - VOCs = 620.00 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: P3a

### 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:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H224 Extremely flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H302 Harmful if swallowed.

EUH019 May form explosive peroxides.

EUH066 Repeated exposure may cause skin dryness or cracking.

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas	2.5	Gases under pressure
Flam. Liq. 1	2.6/1	Flammable liquid, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2



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
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

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
Aerosols 1, H222+H229	On basis of test data
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	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

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Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Áviation 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.