Safety Data Sheet **PETRONAS Durance Diesel Injectors Cleaner -DIESEL CLEAN ML 250**



Safety Data Sheet dated 3/7/2019, version 5

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

1.1. Product identifier

Mixture identification:

PETRONAS Durance Diesel Injectors Cleaner - DIESEL Trade name:

CLEAN ML 250

Trade code: 9067

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):

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

Aquatic Chronic 3, Harmful 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:

H304 May be fatal if swallowed and enters airways.

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.

P273 Avoid release to the environment.

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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

Distillates (petroleum), hydrotreated light

Distillates (petroleum), hydrotreated heavy paraffinic

Baseoil - unspecified

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:

>= 60% - < 70% 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

>= 20% - < 25% 2-Ethylhexyl nitrate

EC: 248-363-6

3.1/4/Dermal Acute Tox. 4 H312

◆ 3.1/4/Inhal Acute Tox. 4 H332

1 3.1/4/Oral Acute Tox. 4 H302

4.1/C2 Aquatic Chronic 2 H411

>= 3% - < 5% 2-Ethylhexan-1-ol

REACH No.: 01-2119487289-20, CAS: 104-76-7, EC: 203-234-3

◆ 3.8/3 STOT SE 3 H335

◆ 3.3/2 Eye Irrit. 2 H319

4 3.2/2 Skin Irrit. 2 H315

◆ 3.1/4/Inhal Acute Tox. 4 H332

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

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 with plenty of water and soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

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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:

Not Recommended Extinguishing Media:

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.

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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

2-Ethylhexyl nitrate

20101.12 - TWA: 1 ppm 2-Ethylhexan-1-ol - CAS: 104-76-7

EU - TWA(8h): 5.4 mg/m3, 1 ppm

ACGIH - TWA: 50 ppm

DNEL Exposure Limit Values

2-Ethylhexan-1-ol - CAS: 104-76-7

Worker Professional: 12.8 mg/m3 - Consumer: 2.3 mg/m3 - Exposure: Human Inhalation

- Frequency: Long Term, systemic effects

Worker Professional: 53.2 mg/m3 - Consumer: 26.6 mg/m3 - Exposure: Human

Inhalation - Frequency: Long Term, local effects

Worker Professional: 53.2 mg/m3 - Consumer: 26.6 mg/m3 - Exposure: Human

Inhalation - Frequency: Short Term, local effects

Worker Professional: 23 mg/kg - Consumer: 11.4 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

Consumer: 1.1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

2-Ethylhexan-1-ol - CAS: 104-76-7

Target: Fresh Water - Value: 0.017 mg/l Target: Marine water - Value: 0.0017 mg/l

Target: Freshwater sediments - Value: 0.28 mg/kg Target: Marine water sediments - Value: 0.028 mg/kg

Target: 09 - Value: 10 mg/l

8.2. Exposure controls

Eye protection:

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

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

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 Brown		
Odour:	Characteristic		

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Odour threshold:	N.A.	 PETRO
pH:	N.A.	
Melting point / freezing point:	N.A.	
Initial boiling point and boiling range:	N.A.	
Flash point:	> 65°C	
Evaporation rate:	N.A.	
Solid/gas flammability:	>65°C	
Upper/lower flammability or explosive limits:	N.A.	
Vapour pressure:	N.A.	
Vapour density:	N.A.	
Relative density:	0,854 g/ml	
Solubility in water:	N.A.	
Solubility in oil:	N.A.	
Partition coefficient (n-octanol/water):	N.A.	
Auto-ignition temperature:	N.A.	
Decomposition temperature:	N.A.	
Viscosity:	N.A.	
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

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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:

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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

Based on available data, the classification criteria are not met 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:

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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

2-Ethylhexyl nitrate

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Negative

e) germ cell mutagenicity:

Test: Mutagenesis Negative

h) STOT-single exposure:

Test: Respiratory Tract Irritant - Route: Inhalation Positive

i) STOT-repeated exposure:

Test: May cause drowsiness and dizziness. Positive

2-Ethylhexan-1-ol - CAS: 104-76-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 2047 mg/kg Test: LC50 - Route: Skin - Species: Rat > 3000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 0.89-5.3 mg/l - Duration: 4h

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive

d) respiratory or skin sensitisation:

Test: Respiratory Tract Irritant - Species: Rabbit Positive

e) germ cell mutagenicity:

Test: Mutagenesis Negative

h) STOT-single exposure:

Test: Respiratory Tract Irritant - Species: mam Positive Test: NOAEL - Route: Oral - Species: Rat 250 mg/kg

Test: NOAEL - Route: Inhalation - Species: Rat 638.4 mg/m3

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

2-Ethylhexyl nitrate

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2 mg/l - Duration h: 96 Endpoint: NOEC - Species: Fish 1.52 mg/l - Duration h: 96 Endpoint: EC50 - Species: Algae 3.22 mg/l - Duration h: 72 Endpoint: EC50 - Species: Daphnia > 12.6 mg/l - Duration h: 48

2-Ethylhexan-1-ol - CAS: 104-76-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 28.2 mg/l - Duration h: 96 Endpoint: LC50 - Species: Fish 17.1 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia 39 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae 11.5 mg/l - Duration h: 72 Endpoint: NOEC - Species: fanghi > 300 mg/l - Duration h: 24

12.2. Persistence and degradability

None

2-Ethylhexyl nitrate

Test: BIOGDG07 - Duration: 28gg - %: 0

2-Ethylhexan-1-ol - CAS: 104-76-7

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Biodegradability: 4 - Duration: 14 days - %: 100

12.3. Bioaccumulative potential

2-Ethylhexyl nitrate

Test: Kow - Partition coefficient 5.24

2-Ethvlhexan-1-ol - CAS: 104-76-7

Test: BCF - Bioconcentrantion factor 25.33

12.4. Mobility in soil

2-Ethylhexan-1-ol - CAS: 104-76-7

Test: Log Koc 1.415

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

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

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

14.6. Special precautions for user

N.A.

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

Nο

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)

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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

Restrictions related to the substances contained:

Restriction 28

Volatile Organic compounds - VOCs = 67.70 %

Volatile Organic compounds - VOCs = 676.95 g/Kg

Volatile Organic compounds - VOCs = 578.12 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

None

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.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H411 Toxic to aquatic life with long lasting effects.

H335 May cause respiratory irritation.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
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
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

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Aquatic Chronic 3 4.1/C3 Chronic (long term) aquatic hazard, ca**RETRO NAS**

Paragraphs modified from the previous revision:

SECTION 5: Firefighting measures SECTION 7: Handling and storage SECTION 15: Regulatory 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
Asp. Tox. 1, H304	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

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.

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RID:

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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.