

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: 411 00 19770-6245-250 ml
411 00 19780-6250-5 L

Product name ANTI-SMOKING ADDITIVE

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

Intended use Anti-smoke additive for diesel engines

1.3. Details of the supplier of the safety data sheet

Name Meccanocar Italia S.r.l.
Full address Via San Francesco, 22
District and Country 56033 Capannoli (PI)
Italy
Tel. +39 0587 609433
Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet moreno.meini@meccanocar.it

1.4. Emergency telephone number

For urgent inquiries refer to

National Poisons Information Service: +44 121 507 4123

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| | | |
|--|------|--|
| Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
| Aspiration hazard, category 1 | H304 | May be fatal if swallowed and enters airways. |
| Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |
| Hazardous to the aquatic environment, chronic toxicity, category 3 | H412 | Harmful to aquatic life with long lasting effects. |

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

ANTI-SMOKING ADDITIVE

Hazard pictograms:



Signal words:

Danger

Hazard statements:

| | |
|---------------|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

Precautionary statements:

| | |
|------------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P331 | Do NOT induce vomiting. |
| P301+P310 | IF SWALLOWED: immediately call a POISON CENTER / doctor. |
| P261 | Avoid breathing dust / fume / gas / mist / vapours / spray. |
| P273 | Avoid release to the environment. |
| P312 | Call a POISON CENTRE / doctor if you feel unwell. |
| P370+P378 | In case of fire: use . . . to extinguish. |
| P391 | Collect spillage. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents / container in accordance with local regulations. |

Contains: DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|---|-------------|---|
| HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC | | |
| CAS 64742-48-9 | 86 ≤ x < 90 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066 |
| EC 919-857-5 | | |
| INDEX - | | |
| Reg. no. 01-2119463258-33-XXXX | | |
| DISTILLATES (PETROLEUM), | | |

ANTI-SMOKING ADDITIVE

**NAPHTHENIC, LIGHT FROM
HYDROTREATING**CAS 64742-53-6 $8 \leq x < 9$ Carc. 1B H350

EC 265-156-6

INDEX 649-466-00-2

Reg. no. 01-2119480375-34-XXXX

**SOLVENT NAPHTHA
(PETROLEUM), HEAVY AROM**CAS 64742-94-5 $4,5 \leq x < 5$ Asp. Tox. 1 H304, EUH066

EC 265-198-5

INDEX 649-424-00-3

Reg. no. 01-2119463588-24-XXXX

NAPHTHALENECAS 91-20-3 $0,5 \leq x < 0,6$ Carc. 2 H351, Acute Tox. 4 H302, Aquatic Chronic 1 H410 M=1

EC 202-049-5

INDEX 601-052-00-2

Reg. no. 01-2119561346-37-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully.

SKIN: Remove contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). If exposed: call a poison center or doctor.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Immediately call a poison center or doctor.

INGESTION: Immediately call a poison center or doctor. Induce vomiting if the person is conscious. Rinse your mouth with running water. Do not give anything by mouth to an unconscious person.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

Information not available

6.3. Methods and material for containment and cleaning up

Information not available

6.4. Reference to other sections

Information not available

SECTION 7. Handling and storage**7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

ANTI-SMOKING ADDITIVE

Information not available

SECTION 8. Exposure controls/personal protection**8.1. Control parameters****DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING****Health - Derived no-effect level - DNEL / DMEL**

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 0,74 mg/kg bw/d | | | | |
| Inhalation | | | 1,19 mg/m3 | 2,73 | 5,58 | | 5,58 mg/m3 | 2,73 mg/m3 |
| Skin | | | | 0,97 | | | | 0,97 mg/kg bw/d |

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM**Health - Derived no-effect level - DNEL / DMEL**

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 19 mg/kg bw/d | | | | |

NAPHTHALENE**Predicted no-effect concentration - PNEC**

| | | |
|--|------|-------|
| Normal value in fresh water | 0,24 | mg/l |
| Normal value in marine water | 0,24 | mg/l |
| Normal value for fresh water sediment | 6,72 | mg/kg |
| Normal value for marine water sediment | 6,72 | mg/kg |
| Normal value of STP microorganisms | 2,9 | mg/l |
| Normal value for the terrestrial compartment | 5,33 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | | | | 25 mg/m3 | 25 mg/m3 |
| Skin | | | | | | | | 3,57 mg/kg bw/d |

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

The product must be used inside a closed circuit, in a well-ventilated environment and with strong localised aspiration systems in place.

HAND PROTECTION

ANTI-SMOKING ADDITIVE

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Chemical resistant gloves are recommended. Nitrile, standards CEN EN 420 and EN 374 provide general requirements and lists of types of gloves.

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|--------------------------------|----------------|
| Appearance | clear liquid |
| Colour | Not available |
| Odour | characteristic |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | -10 °C |
| Initial boiling point | 135 °C |
| Boiling range | 135 °C |
| Flash point | 36 °C |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Not available |
| Lower inflammability limit | Not available |
| Upper inflammability limit | Not available |

ANTI-SMOKING ADDITIVE

| | |
|--|--------------------|
| Lower explosive limit | Not available |
| Upper explosive limit | Not available |
| Vapour pressure | Not available |
| Vapour density | Not available |
| Relative density | 0,77-0,83 |
| Solubility | insoluble in water |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | > 200 °C |
| Decomposition temperature | Not available |
| Viscosity | Not available |
| Explosive properties | not explosive |
| Oxidising properties | non oxidizing |

9.2. Other information

Information not available

SECTION 10. Stability and reactivity**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

May form flammable mixtures with: air.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Avoid heat, sparks, open flames and other sources of ignition.

10.5. Incompatible materials

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Strong oxidants

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information**11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

LD50 (Oral) > 5000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

LC50 (Inhalation) > 5,28 mg/l/4h Rat

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

LD50 (Oral) 5000 mg/kg rat

LD50 (Dermal) 2000 mg/kg rabbit

LC50 (Inhalation) 2,18 mg/l/4h rat

ANTI-SMOKING ADDITIVE

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 423

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: LD50> 15 000 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 1

Species: Rat (Crj; CD (SD); male / female)

Route of exposure: Inhalation (vapors)

Results: LC50> 4 951 mg / m³ air

Method: Equivalent or similar to OECD 402

Reliability: 2

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: LD50> 5 000 mg / kg bw

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: OECD 401

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LD50:> 5 000 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (aerosol)

Results: LC50: 2.18 mg / L air

Method: OECD 402

Reliability: 1

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: LD50:> 5 000 mg / kg bw

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Method: EPA OTS 798.1175

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LD50:> 5 000 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapor)

Results: LC50:> 5.28 mg / L air

Method: EPA OTS 798.1100

Reliability: 1

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: LD50:> 2 000 mg / kg bw

NAPHTHALENE

Method: OECD 401

Reliability: 2

Species: Mouse (CD-1 ICR; male / female)

Route of exposure: Oral

Results: LD50: 533 mg / kg bw

Bibliographic reference: Shopp GM, White KL, Holsapple MP, Barnes DW, et al., Naphthalene Toxicity in CD-1 Mice: General Toxicology and

ANTI-SMOKING ADDITIVE**Immunotoxicology (1984)**

Method: Equivalent or similar to OECD 403

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Inhalation (vapor)

Results: LC50:> 0.4 mg / L air (analytical)

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Dermal

Results: LD50:> 16 000 mg / kg bw

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 404

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Irritating

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not irritating

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Method: EPA Guidelines in FR Vol. 44, No. 145, pgs. 44054-44093

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Irritating

NAPHTHALENE

Method: Consumer Product Safety Commission, USA; Code of Federal Regulation, Title 16, Section 1500.41

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not irritating

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

ANTI-SMOKING ADDITIVE**DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING**

Method: Equivalent or similar to OECD 405

Reliability: 1

Species: Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Method: EPA OTS 798.4500

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

NAPHTHALENE

Method: Consumer Product Safety Commision, USA; Code of Federal Regulation, Title 16, Section 1500.41

Reliability: 2

Species: Rabbit (albino rabbit)

Route of exposure: Ocular

Results: Not irritating

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: Equivalent or similar to OECD 406

Reliability: 1

Species: guinea pig (Hartley; male)

Route of exposure: Dermal

Results: Not sensitizing

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Method: Equivalent or similar to OECD 406-read across

Reliability: 1

Species: guinea pig (Hartley; male)

Route of exposure: Dermal

Results: Not sensitizing

NAPHTHALENE

Method: OECD 406

Reliability: 2

Species: guinea pig (Hartley; male)

Route of exposure: Dermal

Results: Not sensitizing

Skin sensitization

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 406

Reliability: 2

Species: guinea pig (Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

ANTI-SMOKING ADDITIVEGERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative with or without metabolic activation

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral

Results: Negative

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Positive with metabolic activation

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral

Results: Negative

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Method: Equivalent or similar to OECD 479 in vitro test

Reliability: 1

Species: Chinese hamster ovary

Results: Negative

Method: Equivalent or similar to OECD 479 in vivo test

Reliability: 1

Species: Mouse (B6C3F1; male / female)

Route of exposure: Oral

Results: Positive in males, negative in females

NAPHTHALENE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: *S. typhimurium*

Results: Negative

Method: EPA OPP 84-2-test in vivo

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral

Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 453

ANTI-SMOKING ADDITIVE

Reliability: 1
Species: Rat (F344 / N; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC 138 mg / m³ air

NAPHTHALENE

Method: Not indicated
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapor)
Results: Negative

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: OECD 421
Reliability: 1
Species: Rat (CD BR Sprague Dawley; male / female)
Route of exposure: Oral
Results: Negative

NAPHTHALENE

Method: Equivalent or similar to OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapor)
Results: Negative

Adverse effects on sexual function and fertility
HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD TG 413
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC > = 400 ppm

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ANTI-SMOKING ADDITIVE**NAPHTHALENE**

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

Route of exposure

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Dermal and inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 422

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL > = 1000 mg / kg / day

Method: Equivalent or similar to OECD 413

Reliability: 1

Species: Rat (Albino; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEC 10186 mg / m3

DISTILLATES (PETROLEUM), NAPHTHENIC, LIGHT FROM HYDROTREATING

Method: Equivalent or similar to OECD 408

Reliability: 1

Species: Rat (Sprague-Dawley; male)

Route of exposure: Oral

Results: NOAEL = 125 mg / kg bw / day

Method: Equivalent or similar to OECD 412-Read across

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation

Results: NOAEC > 980 mg / m3 air

Method: OECD 410-Read across

Reliability: 1

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: NOAEL = 1000 mg / kg bw / day

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for repeated exposure.

NAPHTHALENE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

NAPHTHALENE

| | |
|---|---------------|
| EC50 - for Crustacea | 2,16 mg/l/48h |
| EC10 for Algae / Aquatic Plants | 16 mg/l/72h |
| Chronic NOEC for Algae / Aquatic Plants | 16 mg/l |

12.2. Persistence and degradability

Petroleum distillates, charcoal, vegetable extracts: they are mixtures of paraffinic, naphthenic, diterpenic and aromatic hydrocarbons. Their behaviour on the environment depends on the concentration. In each case use, according to good working practices, avoiding disposal in the environment. As a rule, the product is poorly biodegradable.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Oil distillates, coal, plant extracts: they are blends of parafin hydrocarbons, naphthenes, diterpenes and aromatics. Their behaviour in the environment depends on their composition. In any case they should be used according to good working practice, avoiding discharging it into the environment.

NAPHTHALENE

Intrinsically biodegradable, 2% in 4 weeks.

SOLVENT NAPHTHA (PETROLEUM),
HEAVY AROM

Rapidly degradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

NAPHTHALENE

ANTI-SMOKING ADDITIVE

It must comply with local authorities and national legislation. Dispose of as toxic and dangerous waste (Directive 78/319 / EC). They must not be disposed of with household waste or strong oxidizing agents. Do not allow the product to reach the sewage system.

SECTION 14. Transport information**14.1. UN number**

| | |
|---------------------------|--|
| ADR / RID, IMDG, IATA: | 3082 |
| ADR / RID: | In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions. |
| IMDG: | In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions. |
| IATA: | In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations. |

14.2. UN proper shipping name

| | |
|------------|---|
| ADR / RID: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| IMDG: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| IATA: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |

14.3. Transport hazard class(es)

| | | |
|------------|----------|----------|
| ADR / RID: | Class: 9 | Label: 9 |
| IMDG: | Class: 9 | Label: 9 |
| IATA: | Class: 9 | Label: 9 |



ANTI-SMOKING ADDITIVE

14.4. Packing group

ADR / RID, IMDG, III
IATA:

14.5. Environmental hazards

ADR / RID: Environmentally
Hazardous



IMDG: Marine Pollutant



IATA: Environmentally
Hazardous



14.6. Special precautions for user

ADR / RID: HIN - Kemler: 90

Limited
Quantities: 5
L

Tunnel
restriction
code: (-)

Special Provision: -

IMDG: EMS: F-A, S-F

Limited
Quantities: 5
L

IATA: Cargo:

Maximum
quantity: 450
L

Packaging
instructions:
964

Pass.:

Maximum
quantity: 450
L

Packaging
instructions:
964

Special Instructions:

A97, A158,
A197

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

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Contained substance

Point 28 DISTILLATES
(PETROLEUM),
NAPHTHENIC,

ANTI-SMOKING ADDITIVE

LIGHT FROM
HYDROTREATING
Reg. no.: 01-
2119480375-34-
XXXX

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|--------------------------|--|
| Flam. Liq. 3 | Flammable liquid, category 3 |
| Carc. 1B | Carcinogenicity, category 1B |
| Carc. 2 | Carcinogenicity, category 2 |
| Acute Tox. 4 | Acute toxicity, category 4 |
| Asp. Tox. 1 | Aspiration hazard, category 1 |
| STOT SE 3 | Specific target organ toxicity - single exposure, category 3 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment, chronic toxicity, category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H226 | Flammable liquid and vapour. |
| H350 | May cause cancer. |
| H351 | Suspected of causing cancer. |
| H302 | Harmful if swallowed. |

ANTI-SMOKING ADDITIVE

| | |
|---------------|---|
| H304 | May be fatal if swallowed and enters airways. |
| H336 | May cause drowsiness or dizziness. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

ANTI-SMOKING ADDITIVE**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.