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 20460-6363-300 ml**
411 00 20470-6364-1 L
411 00 20480-6365-20 L
411 00 20650-200 L

Product name **ENGINE CLEANER DIESEL**

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

Intended use **Additive for cleaning diesel injection systems**

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**
Product distribution by:

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:

Carcinogenicity, category 2	H351	Suspected of causing cancer.
Acute toxicity, category 4	H302	Harmful if swallowed.
Acute toxicity, category 4	H332	Harmful if inhaled.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic 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.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H351	Suspected of causing cancer.
H302+H332	Harmful if swallowed or if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
EUH044	Risk of explosion if heated under confinement.
EUH208	Contains:, AMMINE, POLIETILENEPOLI, PRODOTTI DI REAZIONE CON DERIVATI POLIISOBUTENILICI DI ANIDRIDE SUCCINICA May produce an allergic reaction.

Precautionary statements:

P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P273	Avoid release to the environment.
P261	Avoid breathing fume / mist / vapours.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
Contains:	2-ETILESANOLO 2-ETHYLHEXYL NITRATE 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)
2-ETILESANOLO		

CAS 104-76-7	70 ≤ x < 74	Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 203-234-3		
INDEX -		
Reg. no. 01-2119487289-20-XXXX		
2-ETHYLHEXYL NITRATE		
CAS 27247-96-7	25 ≤ x < 26,5	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Aquatic Chronic 2 H411, EUH044, EUH066
EC 248-363-6		
INDEX -		
Reg. no. 01-2119539586-27-XXXX		
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM		
CAS 64742-94-5	2,5 ≤ x < 3	Asp. Tox. 1 H304, EUH066
EC 265-198-5		
INDEX 649-424-00-3		
Reg. no. 01-2119463588-24-XXXX		
1,2,4-TRIMETHYLBENZENE		
CAS 95-63-6	0,2 ≤ x < 0,25	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 2 H411
EC 202-436-9		
INDEX 601-043-00-3		
Reg. no. 01-2119472135-42-XXXX		
MESITYLENE		
CAS 108-67-8	0 ≤ x < 0,05	Flam. Liq. 3 H226, STOT SE 3 H335, Aquatic Chronic 2 H411
EC 203-604-4		
INDEX 601-025-00-5		

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 contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
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

Evacuate area. Send away individuals who are not suitably equipped. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Use breathing equipment if powders are released into the air.

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

The product must not penetrate into the sewer system or come into contact with surface water or ground water. Avoid the formation of powder and dispersion of the product in the air.

6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. Make sure the leakage site is well aired. It may be advisable to wash with water any surfaces contaminated with traces of dust, without contaminating waste water.

6.4. Reference to other sections

Notify the competent authorities if the product has reached waterways or if it has contaminated the ground or vegetation.

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. 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. 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.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

2-ETILESANOLO

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,017	mg/l
Normal value in marine water	0,002	mg/l
Normal value for fresh water sediment	0,284	mg/kg
Normal value for marine water sediment	0,028	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	55	mg/kg
Normal value for the terrestrial compartment	0,047	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,1 mg/kg bw/d				
Inhalation	26,6 mg/m3		26,6 mg/m3	2,3 mg/m3	53,2 mg/m3		53,2 mg/m3	12,8 mg/m3
Skin				11,4 mg/kg bw/d				23 mg/kg bw/d

2-ETHYLHEXYL NITRATE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,08	mg/l
Normal value in marine water	0,08	mg/l
Normal value for fresh water sediment	0,074	mg/kg
Normal value for marine water sediment	0,074	mg/kg
Normal value of STP microorganisms	10	mg/l

Normal value for the terrestrial compartment	0,0191	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,5 mg/kg bw/d				
Inhalation				8,7 mg/m3				0,35 mg/m3
Skin			2,2 mg/kg bw/d	0,52 mg/kg bw/d			4,4 mg/kg bw/d	1 mg/kg bw/d

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Health - Derived no-effect level - DNEL / DMEL

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

1,2,4-TRIMETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	100	20			
VLEP	FRA	100	20	250	50	
VLEP	ITA	100	20			
TLV	NOR	100	20			
VLE	PRT	100	20			
OEL	EU	100	20			
TLV-ACGIH		123	25			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,12	mg/l
Normal value in marine water	0,12	mg/l
Normal value for fresh water sediment	13,56	mg/kg
Normal value for marine water sediment	13,56	mg/kg
Normal value of STP microorganisms	2,41	mg/l
Normal value for the terrestrial compartment	2,34	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				15 mg/kg bw/d				
Inhalation	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3
Skin				9512 mg/kg bw/d				16171 mg/kg bw/d

MESITYLENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	100	20			

VLEP	FRA	100	20	250	50
VLEP	ITA	100	20		
TLV	NOR	100	20		
VLE	PRT	100	20		
OEL	EU	100	20		
TLV-ACGIH		123	25		

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,101	mg/l
Normal value in marine water	0,101	mg/l
Normal value for fresh water sediment	7,86	mg/kg
Normal value for marine water sediment	7,86	mg/kg
Normal value of STP microorganisms	2,02	mg/l
Normal value for the terrestrial compartment	1,34	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				15 mg/kg bw/d				
Inhalation	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3
Skin				9512 mg/kg bw/d				16171 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

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.

HAND PROTECTION
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 II 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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

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.

2-ETILESANOLO

Occhiali di sicurezza ben aderenti. Oltre agli occhiali, indossare una visiera se esiste una ragionevole possibilità di schizzi sul viso.
L'apparecchiatura deve essere conforme alla norma EN 166.
Protezione mani: materiale adatto gomma nitrilica
Valutazione secondo EN 374: livello 6
Spessore del guanto circa 0,55 mm
Tempo di permeazione> 480 min
Spessore del guanto circa 0,8 mm
Protezione per la respirazione: respiratore con filtro A. Maschera completa con filtro sopra menzionato secondo i produttori che utilizzano requisiti o autorespiratore. Le apparecchiature devono essere conformi a EN 136 o EN 140 e EN 143.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	amber
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 23 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available

Vapour pressure	Not available
Vapour density	Not available
Relative density	0,851
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

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.

2-ETILESANOLO

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Avoid overheating.

2-ETILESANOLO

Evitare il contatto con calore, scintille, fiamme libere e scariche statiche. Evitare qualsiasi fonte di ignizione.

2-ETHYLHEXYL NITRATE

Avoid any contact with sources of heat, flames, sparks or any other sources of ignition. Vapors can be explosive. Avoid overheating of the containers. Containers can violently break due to fire.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

2-ETILESANOLO

Agenti ossidanti.

2-ETHYLHEXYL NITRATE

Avoid contamination with acids, alkalis, reducing and oxidizing agents, amines and phosphorus.
Alkyl nitrates as a class of compounds react violently with strong mineral acids after an induction period of up to several hours to produce a vigorous evolution of gases such as nitrogen oxides. Traces of nitrogen oxides can promote the decomposition of alkyl nitrates. This can cause the container to rupture during heating or pressure build-up if stored for long periods at room temperature. Transition metal oxides or their chelates also significantly accelerate the rate of decomposition.

10.6. Hazardous decomposition products

2-ETHYLHEXYL NITRATE

The products of combustion or thermal decomposition of 2-EHN are carbon oxides and nitrogen.

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:
11,47 mg/l
LD50 (Oral) of the mixture:
2000,00 mg/kg

LD50 (Dermal) of the mixture:
>2000 mg/kg

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

MESITYLENE

LD50 (Oral) 6000 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rat

2-ETILESANOLO

LD50 (Oral) 2047 mg/kg Rat

LD50 (Dermal) > 3000 mg/kg Rat

2-ETHYLHEXYL NITRATE

LD50 (Oral) > 10 mg/kg Rat

LD50 (Dermal) > 5 mg/kg Rabbit

LC50 (Inhalation) > 4,6 mg/l/1h Rat

2-ETILESANOLO

Metodo: Equivalente o similare a OECD 401
Affidabilità: 2
Specie: Ratto (Wistar; maschio)
Via d'esposizione: Orale
Risultati: LD50: ca. 2047 mg/kg bw
Metodo: Equivalente o similare a OECD 403
Affidabilità: 2
Specie: Ratto (Sprague-Dawley; maschio/femmina)
Via d'esposizione: Inalazione (vapore+aerosol)
Risultati: LC50: > 0.89 - <= 5.3 mg/L air
Metodo: OECD 402
Affidabilità: 1
Specie: Ratto (WISW (SPF TNO); maschio/femmina)
Via d'esposizione: Cutanea
Risultati: non classificato

2-ETHYLHEXYL NITRATE

Method: Federal Hazardous Substance Act.
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50:> 10 mL / kg bw
Method: Federal Hazardous Substance Act
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Negative

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

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to EU Method B.1
Reliability: 1
Species: Rat (male)
Route of exposure: Oral
Results: LD50: 6 000 mg / kg bw
Method: Not indicated
Reliability: 2
Species: Rat (CD (COBS); male / female)
Route of exposure: Inhalation
Results: LC50: 10 200 mg / m³ air
Bibliographic reference:
Method: Not indicated
Reliability: 2
Species: Rat (CD (COBS); male / female)
Route of exposure: Dermal
Results: LD50: 4 other: mL / kg bw (3440 mg / kg)

SKIN CORROSION / IRRITATION

Causes skin irritation

2-ETILESANOLO

Metodo: OECD 404
Affidabilità: 1
Specie: Coniglio (Small Russian)
Via d'esposizione: Cutanea
Risultati: Altamente irritante

2-ETHYLHEXYL NITRATE

Method: OECD 404
Reliability: 1
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

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to EU Method B.4
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Irritating
Bibliographic reference: Jacobs G and Martens M, Evaluation of the test method for skin irritation as prescribed by OECD and EEC (1987)

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

2-ETILESANOLO

Metodo: OECD 405
Affidabilità: 1
Specie: Coniglio (Small Russian)
Via d'esposizione: Oculare
Risultati: Categoria 2, irritante per gli occhi

2-ETHYLHEXYL NITRATE

Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Slightly 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

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to OECD 405
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Not irritating

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.Contains:AMMINE, POLIETILENEPOLI, PRODOTTI DI REAZIONE CON DERIVATI POLIISOBUTENILICI DI ANIDRIDE SUCCINICA

2-ETHYLHEXYL NITRATE

Method: OECD 406
Reliability: 1
Species: Guinea pig (Dunkin-Hartley; male / female)
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

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to OECD 406
Reliability: 2
Species: guinea pig (P 'strain; male / female)
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

2-ETILESANOLO

Metodo: OECD 471-test in vitro
Affidabilità: 1
Specie: S. typhimurioum, E.coli
Risultati: Negativo con e senza attivazione metabolica
Metodo: Equivalente o similare a OECD 474-test in vivo
Affidabilità: 2
Specie: Topo (B6C3F1; maschio/femmina)
Via d'esposizione: Cutanea
Risultati: Negativo

2-ETHYLHEXYL NITRATE

Method: OECD 471 in vitro test
Reliability: 1
Species: S. typhimurium, E. coli
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

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 2
Species: TA97a, TA98, TA100, TA102
Results: Negative with and without metabolic activation
Method: Equivalent or similar to OECD 474 in vivo test
Reliability: 2
Species: Mouse (Balb / c; male / female)
Route of exposure: Oral
Results: Negative

CARCINOGENICITY

Suspected of causing cancer

2-ETILESANOLO

Metodo: Equivalente o similare a OECD 451
Affidabilità: 1
Specie: Ratto (Fischer 344; maschio/femmina)
Via d'esposizione: Orale
Risultati: Negativo

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

2-ETILESANOLO

Metodo: OECD 416
Affidabilità: 2
Specie: Ratto (Sprague-Dawley; maschio/femmina)
Via d'esposizione: Orale
Risultati: Negativo. NOAEL=3000 ppm

2-ETHYLHEXYL NITRATE

Method: OECD 421
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: NOAEL = 20

1,2,4-TRIMETHYLBENZENE

Method: Equivalent or similar to OECD 416
Reliability: 1
Species: Rat (Charles River COBS CD; male / female)
Route of exposure: Inhalation (vapor)
Results: NOAEC = 500 ppm

STOT - SINGLE EXPOSURE

May cause respiratory irritation

2-ETILESANOLO

Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza è classificata nella classe di tossicità per organi bersagio per esposizione singola.

2-ETHYLHEXYL NITRATE

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.

1,2,4-TRIMETHYLBENZENE

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

Target organ
2-ETILESANOLO

Tratto respiratorio

1,2,4-TRIMETHYLBENZENE

Respiratory tract

Route of exposure
2-ETILESANOLO

Inalazione

1,2,4-TRIMETHYLBENZENE

Inhalation

<u>STOT - REPEATED EXPOSURE</u>

Does not meet the classification criteria for this hazard class

2-ETILESANOLO

Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza non è classificata nella classe di tossicità per organi bersaglio a esposizione ripetuta.

2-ETHYLHEXYL NITRATE

Method: OECD 413-Read across
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC> = 120 ppm
Method: EPA OPP 82-2
Reliability: 2
Species: Rabbit (Albino; male / female)
Route of exposure: Dermal
Results: Negative, NOAEL = 500 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.

1,2,4-TRIMETHYLBENZENE

Method: OECD 408-Read across
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: NOAEL = 600 mg / kg bw / day
Method: Equivalent or similar to OECD 452
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC = 1800 mg / m3 air

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

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

12.1. Toxicity

MESITYLENE	
LC50 - for Fish	12,52 mg/l/96h Carassius auratus
EC50 - for Crustacea	6 mg/l/48h Daphnia magna
2-ETILESANOLO	
LC50 - for Fish	17,1 mg/l/96h
EC50 - for Crustacea	39 mg/l/48h
EC50 - for Algae / Aquatic Plants	16,6 mg/l/72h
EC10 for Algae / Aquatic Plants	5,3 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	5,3 mg/l
2-ETHYLHEXYL NITRATE	
EC50 - for Crustacea	> 12,6 mg/l/48h

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.
2-ETILESANOLO
Rapidamente degradabile, 96% in 9 giorni (OECD TG 301 C)
2-ETHYLHEXYL NITRATE
Not intrinsically degradable, 0% in 28 days (OECD 310)
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.

1,2,4-TRIMETHYLBENZENE	
Solubility in water	0,1 - 100 mg/l
Rapidly degradable	

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM	
Rapidly degradable	

MESITYLENE	
Solubility in water	0,1 - 100 mg/l
NOT rapidly degradable	

12.3. Bioaccumulative potential

1,2,4-TRIMETHYLBENZENE	
Partition coefficient: n-octanol/water	3,65
BCF	243

MESITYLENE	
Partition coefficient: n-octanol/water	3,42

12.4. Mobility in soil

1,2,4-TRIMETHYLBENZENE	
Partition coefficient: soil/water	3,04

MESITYLENE	
Partition coefficient: soil/water	2,87

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.

2-ETILESANOLO
Informazioni sul prodotto: smaltimento richiesto in conformità con tutte le normative statali e locali relative alla gestione dei rifiuti. La scelta del il metodo di smaltimento appropriato dipende dalla composizione del prodotto in base al tempo di smaltimento e dal locale statuto e possibilità di smaltimento.
Rifiuti pericolosi secondo il Catalogo europeo dei rifiuti (CAE)

2-ETHYLHEXYL NITRATE
Recover the product when possible. Incineration in authorized plants on-site or off-site equipped with post-combustion systems of combustion gases, wet washing and dedusting is the preferred disposal practice. Provided that 2-EHN is not limited, there should be no risk of violent decomposition. 2-EHN is not suitable for landfills or treatments with biological processes. Decomposition and fire can also occur with waste containing 2-EHN in case of overheating or contact with reactive materials.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA:	1993

14.2. UN proper shipping name

ADR / RID:	FLAMMABLE LIQUID, N.O.S.
IMDG:	FLAMMABLE LIQUID, N.O.S.
IATA:	FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID:	Class: 3	Label: 3
IMDG:	Class: 3	Label: 3
IATA:	Class: 3	Label: 3

14.4. Packing group

ADR / RID, IMDG, IATA:	III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)

	Special Provision: -		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3	

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: E2

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

Product
Point 3 - 40

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. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H302+H332	Harmful if swallowed or if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
EUH044	Risk of explosion if heated under confinement.
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

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- The Merck Index. - 10th Edition
- Handling Chemical Safety
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- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

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.

Changes to previous review:
The following sections were modified:
02 / 03 / 08 / 11 / 12 / 15 / 16.