SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : A02142

Essence SPB LMS

Date of the previous version: 2015-01-19 **Revision Date:** 2015-07-21 **Version** 7

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name **Essence SPB LMS**
Substance/mixture Mixture

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

Identified uses Fuel.

1.3. Details of the supplier of the safety data sheet

Supplier

TOTAL ADDITIFS ET CARBURANTS SPECIAUX
Place du Bassin
69700 Givors
Tel: +33 (0) 4 72 49 27 00
Fax: +33 (0) 4 78 07 92 49

For further information, please contact:

Contact Point service HSE
E-mail Address rm.acs-fds@total.com

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
France - ORFILA (INRS) Tél : +33 (0)1 45 42 59 59
In France : - PARIS : Hôpital Fernand Widal 200, rue du Faubourg Saint-Denis 75475 Paris Cédex 10 , Tel : 01.40.05.48.48. - MARSEILLE : Hopital Salvator, 249 bd Ste Marguerite 13274 Marseille cedex 5, Tel : 04.91.75.25.25. - LYON : Hopital Edouard Herriot, 5 place d'Arsonvol, 69437 Lyon cedex 3, Tel : 04.72.11.69.11. - NANCY : Hopital central, 29 Av du Mal De Lattre de Tassigny, 54000 Nancy, Tel : 03.83.32.36.36 ou le SAMU : Tel (15)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008
For the full text of the H-Statements mentioned in this Section, see Section 2.2.

Classification
Flammable liquids - Category 2 - (H225)
Aspiration toxicity - Category 1 - (H304)
Skin corrosion/irritation - Category 2 - (H315)
Germ Cell Mutagenicity - Category 1B - (H340)
Carcinogenicity - Category 1B - (H350)

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Reproductive toxicity - Category 2 - (H361)
Specific target organ toxicity (single exposure) - Category 3 - (H336)
Specific target organ toxicity (repeated exposure) - Category 2 - (H373)
Chronic aquatic toxicity - Category 2 - (H411)

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008

Contains Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2), Hydrocarbons, C4-6, dependanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%), Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, toluene, Xylene (mixed isomers o, m, p)

Signal Word
DANGER

Hazard Statements
H225 - Highly flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H350 - May cause cancer
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/equipment
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor
P331 - Do NOT induce vomiting
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of water/soap
P260 - Do not breathe dust / fume / gas / mist / vapors / spray
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P314 - Get medical attention/advice if you feel unwell
P202 - Do not handle until all safety precautions have been read and understood
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P273 - Avoid release to the environment
P501 - Dispose of contents/container to A collection centre for hazardous or special waste

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2.3. Other hazards

Environmental properties Should not be released into the environment.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

Hazardous ingredients

Chemical Name	EC-No	REACH registration No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2)	271-267-0	01-2119471477-29	68527-27-5	25 - 50	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Aquatic Chronic 2 (H411)
toluene	203-625-9	01-2119471310-51	108-88-3	25 - 50	Flam. Liq. 2 (H225) Skin Irrit. 2 (H315) Repr. 2 (H361d) STOT SE 3 (H336) STOT RE 2 (H373) Asp. Tox. 1 (H304) Aquatic Chronic 3 (H412)
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%)	295-298-4	01-2119486400-43	91995-38-9	10 - 25	Flam. Liq. 1 (H224) Carc. 1B (H350) Muta. 1B (H340) STOT RE 2 (H373) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Aquatic Chronic 2 (H411)
Propane, 2-methoxy-2-methyl	216-653-1	01-2119452786-27	1634-04-4	10 - 25	Flam. Liq. 2 (H225) Skin Irrit. 2 (H315)
Xylene (mixed isomers o, m, p)	215-535-7	01-2119488216-32	1330-20-7	5 - 10	Flam. Liq. 3 (H226) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Chronic 3 (H412)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	920-750-0	01-2119473851-33	^	2.5 - 5	Flam. Liq. 2 (H225) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)

Other constituents required for disclosure

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Chemical Name	EC-No	REACH registration No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Pentane	203-692-4	01-2119459286-30	109-66-0	5-10	Flam. Liq. 2 (H225) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)
2-methylbutane	201-142-8	01-2119475602-38	78-78-4	2.5 - 5	Flam. Liq. 1 (H224) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)
Ethylbenzene	202-849-4	01-2119489370-35	100-41-4	1 - 2.5	Flam. Liq. 2 (H225) Acute Tox. 4 (H332) Asp. Tox. 1 (H304) STOT RE 2 (H373) Aquatic Chronic 3 (H412)
n-heptane	205-563-8	01-2119457603-38	142-82-5	0.1 - 1	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315) STOT SE 3 (H336)

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE. Show this material safety data sheet to the doctor in attendance.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract. If not breathing, give artificial respiration. Call a physician immediately.

Ingestion Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Clean mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.

Protection of First-aiders Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment.

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

Eye contact Burning feeling and temporary redness.

Skin contact	Reddening, irritation.
Inhalation	Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Harmful: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours).

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO_2). ABC powder. Foam. Cool containers / tanks with water spray. Water spray, fog or regular foam.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special Hazard	Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters	In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Other information	Cool down any tanks and surfaces exposed to fire by spraying abundantly with water. Use water to cool tanks and parts exposed to the thermal flux not caught up in the flames. Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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General Information	Except in case of small spillages. The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. If required, notify relevant authorities according to all applicable regulations. Evacuate non-essential personnel. For personal protection see section 8. Stop or contain leak at the source, if safe to do so. Cut off the electric power supply if this operation causes no sparks in the area containing vapors from the product. Stay upwind. In case of large spillages, alert occupants in downwind areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). In case of important spillages: risk of fire or explosion . Cover discharges with foam in order to reduce the risks of ignition. Vapours are heavier than air and may spread near ground level to sources of ignition .
Advice for non-emergency personnel	Do not touch or walk through spilled material. For personal protection see section 8. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
Advice for emergency responders	Take all appropriate steps to avoid fire, explosion and inhalation hazards to the rescuers including the use of breathing apparatus. In case of. Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves (preferably gauntlets) providing adequate chemical resistance. Remarks:. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Work helmet. Antistatic non-skid safety shoes or boots. Goggles and/or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection. A half or full-face respirator with filter(s) for organic vapours (and when applicable: for H2S). A Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

6.2. Environmental precautions

General Information	Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. The product should not be allowed to enter drains, water courses or the soil. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. In case of spill in river, suspend the use of the water downstream to the spillpoint.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	Dam up. Ground and bond containers when transferring material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

6.4. Reference to other sections

Personal Protective Equipment	See Section 8 for more detail.

Waste treatment See section 13.

Other information Recommended measures are based on the most likely spillage scenarios for this material. However, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions.
For this reason, local experts should be consulted when necessary.
Local regulations may also prescribe or limit actions to be taken.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling NEVER ATTEMPT TO PRIME THE CONTAINER SIPHON BY SUCKING WITH THE MOUTH.
Avoid contact with skin, eyes and clothing. Prevent the formation of vapors, mists and aerosols. Take precautionary measures against static electricity. Ensure that all relevant regulations regarding explosive atmospheres, handling and storage facilities of flammable products, are followed. The inspection, cleaning and maintenance of storage containers require the application of strict procedures and must be entrusted to qualified personnel (internal or external).
Ensure adequate ventilation. Vapors may form explosive mixtures with air. Do not smoke.
Avoid breathing vapors or mists.
Do not use compressed air for filling, discharging, or handling operations. Never pierce, drill, grind, cut, saw or weld any empty container.
For personal protection see section 8.

Technical measures Ensure adequate ventilation.
WHILE MOVING THE PRODUCT:. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.
Take all necessary precautions to prevent water from entering the containers, tanks, transfer lines etc...

Prevention of fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors. Do not allow splash loading and ensure that the product is poured slowly, particularly at the beginning of the operation.

Hygiene measures When using, do not eat, drink or smoke.
Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product.
Use personal protective equipment as required. Avoid breathing vapors, mist or gas. IF ON SKIN: Wash skin with soap and water.
Remove contaminated clothing and shoes. Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation.
All the electric installations, including the lighting of rooms that may contain this product, must be adapted to the risk area, in compliance with the European ATEX directives. Take precautionary measures against static discharges.
Ensure all equipment is electrically grounded before beginning transfer operations. Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in case of leaks or spills. Do not remove the hazard labels of the containers (even if they are empty).
Store the packed products (drums, samples, cans ...) in properly ventilated rooms, away from damp, heat and any potential source of ignition.
Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Keep containers tightly closed and properly labelled.
Store separately from oxidising agents.

Materials to Avoid

Strong oxidizing agents. Strong bases.

Packaging material

Use only containers, seals, pipes, etc... made in a material suitable for use with aromatic hydrocarbons,

7.3. Specific end uses

Specific use(s)

Must not be used for cleaning processes.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

Ingredients with workplace control parameters

Chemical Name	European Union
toluene 108-88-3	TWA 50 ppm TWA 192 mg/m³ STEL 100 ppm STEL 384 mg/m³ S*
Propane, 2-methoxy-2-methyl 1634-04-4	STEL 100 ppm STEL 367 mg/m³ TWA 50 ppm TWA 183.5 mg/m³
Xylene (mixed isomers o, m, p) 1330-20-7	TWA 50 ppm TWA 221 mg/m³ STEL 100 ppm STEL 442 mg/m³ S*

Other constituents required for disclosure

Chemical Name	European Union
Pentane 109-66-0	TWA 1000 ppm TWA 3000 mg/m³
2-methylbutane 78-78-4	TWA 1000 ppm TWA 3000 mg/m³

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Ethylbenzene 100-41-4	TWA 100 ppm TWA 442 mg/m³ STEL 200 ppm STEL 884 mg/m³ S*
n-heptane 142-82-5	TWA 500 ppm TWA 2085 mg/m³

Legend See section 16

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5	1300 mg/m³/15min (inhalation)	1100 mg/m³/15min (inhalation)		840 mg/m³/8h (inhalation)
toluene 108-88-3	384 mg/m³ (inhalation)	384 mg/m³ (inhalation)	192 mg/m³ (inhalation) 384 mg/kg bw/day (dermal)	192 mg/m³ (inhalation)
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9	1300 mg/m³/15min (inhalation)	1100 mg/m³/15min (inhalation)		840 mg/m³/8h (inhalation)
Propane, 2-methoxy-2-methyl 1634-04-4	357 mg/m³/15min (inhalation)	357 mg/m³/15 min (inhalation)	5100 mg/kg/8h (dermal) 1785.5 mg/m³/8h (inhalation)	1785.5 mg/m³/8h (inhalation)
Xylene (mixed isomers o, m, p) 1330-20-7	289 mg/m³ (Ethylbenzene-inhalation)	289 mg/m³ (Ethylbenzene-inhalation)	77 mg/m³ (ethylbenzene-inhalation) 180 mg/kg bw/day (ethylbenzene-dermal)	
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^			773 mg/kg bw/day (dermal) 2035 mg/m³/8h (inhalation)	-

DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5	1200 mg/m³/15min (inhalation)	640 mg/m³/15min (inhalation)		180 mg/m³/24h (inhalation)

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toluene 108-88-3	226 mg/m³ (inhalation)	226 mg/m³ (inhalation)	226 mg/kg bw/day (dermal) 56.5 mg/m³ (inhalation) 8.13 mg/kg bw/day (oral)	
Hydrocarbons, C4-6, dependanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9	1200 mg/m³/15min (inhalation)	640 mg/m³/15min (inhalation)		180 mg/m³/24h (inhalation)
Propane, 2-methoxy-2-methyl 1634-04-4	214 mg/m³/15 min (inhalation)	214 mg/m³/15 min (inhalation)	7.1 mg/kg/24h (oral) 3570 mg/kg/24h (dermal) 53.6 mg/m³/24h (inhalation)	53.6 mg/m³/24h (inhalation)
Xylene (mixed isomers o, m, p) 1330-20-7	174 mg/m³ (ethylbenzene-inhalation)	174 mg/m³ (ethylbenzene-inhalation)	14.8 mg/m³ (ethylbenzene-inhalation) 108 mg/kg bw/day (ethylbenzene-dermal) 1.6 mg/kg bw/day (ethylbenzene-oral)	
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^			699 mg/kg bw/day (dermal) 608 mg/m³/24h (inhalation) 699 mg/kg bw/day (oral)	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
toluene 108-88-3	0.68 mg/l fw 0.68 mg/l mw 0.68 mg/l or	16.39 mg/kg dw fw 16.39 mg/kg dw mw	2.89 mg/kg dw		13.61 mg/l	
Propane, 2-methoxy-2-methyl 1634-04-4		23 mg/kg d.w. (freshwater sediment) 1.17 mg/kg d.w. (marine sediment)	1.43 mg/kg w.w.		71 mg/L	
Xylene (mixed isomers o, m, p) 1330-20-7	0.327 mg/l fw, mw, or	12.46 mg/kg sediment dw	2.31 mg/kg soil dw		6.58 mg/l	

8.2. Exposure controls

Occupational Exposure Controls

Engineering Measures Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

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Personal Protective Equipment

General Information	Protective engineering solutions should be implemented and in use before personal protective equipment is considered.
Respiratory protection	When using a mask or half mask :. Respirator with a vapor filter (EN 14387). Type AX. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.
Eye Protection	If splashes are likely to occur, wear:. Safety glasses with side-shields.
Skin and body protection	Impervious gloves. Antistatic boots. Wear fire/flame resistant/retardant clothing. Long sleeved clothing. Chemical resistant apron. Apron. Wear suitable protective clothing. Protective shoes or boots.
Hand Protection	Hydrocarbon-proof gloves for aromatic hydrocarbons. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

Environmental exposure controls

General Information	Local authorities should be advised if significant spillages cannot be contained. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Color	colorless
Physical State @20°C	liquid
Odor	Hydrocarbon-like

Property	Values	Remarks	Method
pH		Not applicable	
Boiling point/boiling range	**36 °C**		EN ISO 3405
	97 °F		EN ISO 3405
Flash point	**< -40 °C**		ISO 2719
	< -40 °F		ISO 2719
Evaporation rate		Not applicable	
Flammability Limits in Air		No information available	
Vapor Pressure	480 hPa	@ 37.8 °C	EN 13016-1
Vapor density	> 1	(Air = 1)	
Density	752 kg/m³	@ 15 °C	ISO 12185
Water solubility		Not applicable	
Solubility in other solvents		Not applicable	
logPow		Not applicable	
Autoignition temperature		No information available	

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Viscosity, kinematic	< 6 mm2/s	@ 40 °C	ISO 3104
Explosive properties	Not considered explosive based on chemical structure and oxygen balance considerations		
Oxidizing Properties	This product is not considered oxidising based on chemical structure considerations		
Possibility of hazardous reactions	No data available		

9.2. Other information

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

General Information No information available.

10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions None under normal processing.

10.4. Conditions to Avoid

Conditions to Avoid Heat, flames and sparks. Take precautionary measures against static discharges. Heating in air.

10.5. Incompatible Materials

Materials to Avoid Strong oxidizing agents. Strong bases.

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products None under normal use. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Carbon oxides.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact . Reddening, irritation.

Eye contact . Burning feeling and temporary redness.

Inhalation . Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.

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Ingestion . Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Unknown Acute Toxicity

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2)	LD50 > 5000 mg/kg bw (rat - OECD TG 401)	LD50 > 2000 mg/kg bw (rabbit - OECD TG 402 - under occlusive conditions)	LC50 (4h) > 5610 mg/m³ air (vapor) (rat - OECD 403)
toluene	5580 mg/kg bw (rat)	> 5000 mg/kg bw (rabbit)	28.1 mg/L (Rat-vapour) 4h
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%)	LD50 > 5000 mg/kg bw (rat - OECD TG 401)	LD50 > 2000 mg/kg bw (rabbit - OECD TG 402 - under occlusive conditions)	LC50 (4h) > 5610 mg/m³ air (vapor) (rat - OECD 403)
Propane, 2-methoxy-2-methyl	= 4 g/kg (Rat)	> 2000 mg/kg (Rat) > 10000 mg/kg (Rabbit)	= 23576 ppm (Rat) 4 h = 85 mg/L (Rat) 4 h
Xylene (mixed isomers o, m, p)	LD50 = 3523 mg/kg bw (rat)	LD50 = 12126 mg/kg bw (rabbit)	CL50 (4h) = 27124 mg/m³ (rat - vapors)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	LD50 > 5840 mg/kg bw (rat)	LD50 (24h) > 2920 mg/kg bw (rat)	LC50 (4h) > 23300 mg/m³ (vapour) (rat - OECD 403)

Sensitization

Sensitization The current toxicological knowledge allows to not classify the product as a sensitizer.

Specific effects

Carcinogenicity May cause cancer.

Chemical Name	European Union
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5	-
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9	Carc. 1B (H350)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^	-

Mutagenicity May cause genetic defects.

Chemical Name	European Union
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5	-
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9	Muta. 1B (H340)
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^	-

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Chemical Name	European Union
toluene 108-88-3	Repr. 2 (H361d)

Repeated Dose Toxicity

Subchronic toxicity May cause damage to organs through prolonged or repeated exposure.

Target Organ Effects (STOT)

Target Organ Effects (STOT) May cause drowsiness and dizziness.

Aspiration toxicity May be fatal if swallowed and enters airways.

Other information

Neurological effects No information available.

Other adverse effects No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5	EL50 (72 h) > 3.1 mg/l (Selenastrum capricornutum/Pseudokirchnerella subcapitata - OECD 201)	EL50 (48 h) > 4.5 mg/l (Daphnia magna - OECD 202)	LL50 (96 h) > 8.2 mg/l (Pimephales promelas - OECD 203)	
toluene 108-88-3	EC50 (3 h) 134 mg/l Chlorella vulgaris	EC50 (48h) 3.78mg/l Daphnia magna	LC50 (96h) 5.5 mg/l Oncorhynchus kisutch	-
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9	EL50 (72 h) > 3.1 mg/l (Selenastrum capricornutum/Pseudokirchnerella subcapitata - OECD 201)	EL50 (48 h) > 4.5 mg/l (Daphnia magna - OECD 202)	LL50 (96 h) > 8.2 mg/l (Pimephales promelas - OECD 203)	
Propane, 2-methoxy-2-methyl 1634-04-4	EC50 (72h) > 800 mg/L Desmodesmus subspicatus EC50 (96h) = 184 mg/L Pseudokirchneriella subcapitata	EC50 (48h) = 542 mg/L Daphnia magna	LC50 (96h) = 672 mg/L Pimephales promelas (flow-through) LC50 (96h) > 100 mg/L Brachydanio rerio (semi-static) LC50 (96h) = 929 mg/L Pimephales promelas (static) LC50 (96h) = 887 mg/L Oncorhynchus mykiss (flow-through)	
Xylene (mixed isomers o, m, p) 1330-20-7	IC50 (72h) = 2.2 mg/l	EC50 (48h) = 1.0 mg/l (Daphnia magna)	LC50 (96h) 2.6 mg/l Oncorhynchus mykiss	

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Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^	EbL50 (72h) = 10-30 mg/l (Pseudokirchneriella subcapitata - OECD 201) ErL50 (72h) = 10-30 mg/l (Pseudokirchneriella subcapitata - OECD 201)	EL50 (48h) = 4,6-10,0 mg/l (Daphnia magna - OECD 202)	LL50 (96h) = 3-10 mg/l (Oncorhynchus mykiss - OECD 203)	-

Chronic aquatic toxicity - Product Information
No information available.

Chronic aquatic toxicity - Component Information
.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Naphtha (petroleum), full-range alkylate, butane-contg. (benzene < 0,1% - toluene < 3% - n-hexane < 3% - Flam. Liq. 2) 68527-27-5		NOEL (21d) > 2.6 mg/l (Daphnia magna - OECD 211)	NOEL (14/28d) > 2.6 mg/l (Read across from Daphnia magna)	
toluene 108-88-3	NOEC(72h) 10 mg/l Skeletonema costatuM	NOEC (7d) 0.74 mg/l (Ceriodaphnia dubia) EC50 (7d) 3.23 mg/l (Ceriodaphnia dubia) LOEC (7d) 2.76 mg/l (Ceriodaphnia dubia)	NOEC (40d) 1.39 mg/l (Oncorhynchus kisutch) LOEC (40d) 2.77 mg/l (Oncorhynchus kisutch)	
Hydrocarbons, C4-6, depentanizer lights, arom. Hydrotreater (benzene < 10% - toluene < 3% - n-hexane < 3%) 91995-38-9		NOEL (21d) > 2.6 mg/l (Daphnia magna - OECD 211)	NOEL (14/28d) > 2.6 mg/l (Read across from Daphnia magna)	
Xylene (mixed isomers o, m, p) 1330-20-7	NOEC(72h) 0.44 mg/l			
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ^	NOELR (72h) = 6,3 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 6,3 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)	NOELR (21d) = 1 mg/l (Daphnia magna - OECD 211)	NOELR (28d) = 0,57 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	

Effects on terrestrial organisms
No information available.

12.2. Persistence and degradability

General Information
No information available.

12.3. Bioaccumulative potential

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Product Information No information available.

logPow Not applicable

Component Information .

Chemical Name	log Pow
toluene - 108-88-3	2.73
Propane, 2-methoxy-2-methyl - 1634-04-4	1.06
Xylene (mixed isomers o, m, p) - 1330-20-7	3.15

12.4. Mobility in soil

Soil Given its physical and chemical characteristics, the product is generally mobile in the ground. It may contaminate ground water.

Air The product evaporates in the air and dissipates more or less depending on local conditions. However, it may stagnate in pools in low-lying areas, in an undisturbed or confined atmosphere.

Water The product spreads on the surface of the water. A small amount may solubilise in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

General Information No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated packaging Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Other information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

ADR/RID

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UN/ID No	UN1203
Proper shipping name	Gasoline
Proper shipping name	Gasoline
Hazard class	3
Subsidiary Class	3
Packing Group	II
Environmental hazard	Yes
Classification Code	F1
Special Provisions	243, 534, 363
Tunnel Restriction Code	(D/E)
ADR Hazard Id (Kemmler Number)	33
Description	UN1203, GASOLINE, 3, II, (D/E)
Excepted Quantity	E2
Limited quantity	1 L

IMDG/IMO

UN/ID No	UN1203
Proper shipping name	Gasoline
Hazard class	3
Packing Group	II
Marine pollutant	P
EmS No.	F-E, S-E
Description	UN1203, Gasoline, 3, II, (-40°C c.c.)
Special Provisions	243, 363
Excepted Quantity	E2
Limited quantity	1 L

ICAO/IATA

UN/ID No	UN1203
Proper shipping name	Gasoline
Hazard class	3
Packing Group	II
ERG Code	3H
Special Provisions	A100
Description	UN1203, Gasoline, 3, II
Excepted Quantity	E2
Limited quantity	1 L

ADN

UN/ID No	UN1203
Proper shipping name	Gasoline
Proper shipping name	Gasoline
Hazard class	3
Packing Group	II
Environmental hazard	Yes
Classification Code	F1
Special Provisions	243, 363, 534
Description	UN1203, GASOLINE, 3, II
Excepted Quantity	E2
Limited quantity	1 L

Ventilation	VE01

Section 15: REGULATORY INFORMATION

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

European Union

REACH
This mixture contains only ingredients which have been registered according to Regulation (EC) No. 1907/2006 (REACH).

Other regulations
Directive 1999/13/EC on the limitation of emissions of volatile organic compounds

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories	All the substances contained in this product are listed or exempted from listing in the following inventories: Europe (EINECS/ELINCS/NLP) U.S.A. (TSCA)

Further information

No information available

15.2. Chemical Safety Assessment

Chemical Safety Assessment	No information available

Section 16: OTHER INFORMATION

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Full text of H-Statements referred to under sections 2 and 3
H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H361d - Suspected of damaging the unborn child
H336 - May cause drowsiness or dizziness
H373 - May cause damage to the kidneys/liver/eyes/brain/digestive system/central nervous system through prolonged or repeated exposure if swallowed
H304 - May be fatal if swallowed and enters airways
H412 - Harmful to aquatic life with long lasting effects
H226 - Flammable liquid and vapor
H312 - Harmful in contact with skin
H332 - Harmful if inhaled
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H411 - Toxic to aquatic life with long lasting effects
H224 - Extremely flammable liquid and vapor
H350 - May cause cancer if swallowed
H340 - May cause genetic defects if inhaled

Abbreviations, acronyms

Legend Section 8
TWA: Time Weight Average
STEL: Short Time Exposure Limit

+	Sensitizer	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date: 2015-07-21
Revision Note (M)SDS sections updated. 2. 3.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet