

**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING** \*

**1.1. Product identifier**

Product name : STAR BRITE L.P.C. DIESEL FUEL ADDITIVE  
Product code : 955XX

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

Application : SU21 Consumer product.

**1.3. Details of the supplier of the safety data sheet**

Supplier : Star Brite Europe Inc.  
86 bis route de Brignais  
69630 Chaponost, France  
Telephone : +33-478-56-77-80  
Fax : +33-472-39-97-96  
E-mail : jp.kitzinger@starbrite-europe.com  
Website : www.starbrite.com

**1.4. Emergency telephone number**

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:  
FR - Telephone : +33-478-56-77-80 (During office hours only)  
EMERGENCY TELEPHONE NUMBER (for DOCTORS only):  
National Poisons Information Service +44-844 892 0111 (24/7)

**SECTION 2 HAZARDS IDENTIFICATION** \*

**2.1. Classification of the substance or mixture**

CLP classification : Skin irritation, category 2. Aspiration hazard, category 1. Hazardous to the aquatic environment — (1272/2008/EC) Chronic category 2.  
Human health hazards : May be fatal if swallowed and enters airways. Causes skin irritation.  
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible. Risk of explosion if heated under confinement.  
Environmental hazards : Toxic to aquatic life with long lasting effects.

**2.2. Label elements**

Label elements (1272/2008/EC):  
Hazard pictograms :



Signal word : Danger  
H- and P-phrases : H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H411 Toxic to aquatic life with long lasting effects.  
EUH044 Risk of explosion if heated under confinement.  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P264 Wash hands thoroughly after handling.  
P280 gloves Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P331 Do NOT induce vomiting.  
 P405 Store locked up.  
 P273 Avoid release to the environment.  
 P391 Collect spillage.  
 P501 Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml:

Hazard pictograms :



Signal word : Danger

H- and P-phrases : H304 May be fatal if swallowed and enters airways.  
 EUH044 Risk of explosion if heated under confinement.  
 P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P331 Do NOT induce vomiting.  
 P405 Store locked up.  
 P501 Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; Solvent naphtha (petroleum), light aromatic ; Mesitylene ; Kerosine (petroleum) .

Other information : According to regulation (EC) 1272/2008, Annex II, part 3, the packaging of this product shall carry a tactile warning of danger and a child-resistant fastening.

### 2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

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### 3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	50 - 75	-----	926-141-6		01-2119456620-43
2-Ethylhexyl nitrate	10 - < 25	27247-96-7	248-363-6		
Solvent naphtha (petroleum), light aromatic	10 - < 20	64742-95-6	265-199-0		
1,2,4-Trimethylbenzene	5 - < 10	95-63-6	202-436-9		
Mesitylene	1 - < 2,5	108-67-8	203-604-4		
Kerosine (petroleum)	1 - < 2,5	8008-20-6	232-366-4		
Xylene (mixed isomers)	0,1 - < 1	1330-20-7	215-535-7		
Cumene	0,1 - < 1	98-82-8	202-704-5		
Naphthalene	0,1 - < 0,25	91-20-3	202-049-5		

Occupational exposure limit(s), if relevant, are listed in section 8.

Substance name	Hazard Class	H-phrases	Pictograms
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Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics 2-Ethylhexyl nitrate	Asp. Tox. 1	H304; EUH066	GHS08	
	Acute Tox. 4; Aquatic Chronic 2	H302; H312; H332; H411; EUH044; EUH066	GHS07; GHS09	
Solvent naphtha (petroleum), light aromatic	Asp. Tox. 1; Aquatic Chronic 2; STOT SE 3; Flam. Liq. 3	H226; H304; H335; H336; H411; EUH066	GHS02; GHS07; GHS08; GHS09	
1,2,4-Trimethylbenzene	Flam. Liq. 3; Acute Tox. 4; Eye Irrit. 2; STOT SE 3; Skin Irrit. 2; Aquatic Chronic 2	H226; H332; H319; H335; H315; H411	GHS02; GHS07; GHS09	
Mesitylene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Aquatic Chronic 2	H226; H304; H315; H319; H335; H411	GHS02; GHS07; GHS09	H335 : C ≥ 25 %
Kerosine (petroleum)	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; STOT SE 3; Aquatic Chronic 2	H226; H304; H315; H336; H411	GHS02; GHS07; GHS08; GHS09	
Xylene (mixed isomers)	Flam. Liq. 3; Asp. Tox. 1; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 2	H226; H304; H332; H312; H315; H319; H335; H373	GHS02; GHS07; GHS08	
Cumene	Flam. Liq. 3; Asp. Tox. 1; STOT SE 3; Aquatic Chronic 2	H226; H304; H335; H411	GHS02; GHS08; GHS07; GHS09	
Naphthalene	Carc. 2; Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1	H351; H302; H400; H410	GHS07; GHS08; GHS09	M (acute) = 1

Reference is made to chapter 16 for full text of each relevant H phrase.

**SECTION 4 FIRST-AID MEASURES**

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**4.1. Description of first aid measures**

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation persists.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Give nothing to drink. Do rinse the mouth. As necessary give 1 or 2 soup spoons of laxative (sodium sulphate). Never give anything by mouth to an unconscious person. Consult a doctor immediately if victim feels unwell.

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

Effects and symptoms

- Inhalation : May cause headache, dizziness and a feeling of sickness.
- Skin contact : Irritant. May cause redness. Repeated exposure may cause skin dryness or cracking.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea. May cause lung damage, sore throat and lack of breath.

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.  
Not suitable : Water jet.

### 5.2. Special hazards arising from the substance or mixture

Special exposure hazards : None known.  
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

### 5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

### 6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.  
Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

### 6.4. Reference to other sections

Reference to other sections : See also section 8.

## SECTION 7 HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Do not breathe vapour. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents. Keep away from food, drink and animal feedingsuffs.  
Recommended packaging : Keep only in the original container.  
Non recommended packaging : PE and PP.

**7.3. Specific end use(s)**

Use : Use only as directed.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION** \*

**8.1. Control parameters**

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour (mg/m <sup>3</sup> )	STEL 15 min (mg/m <sup>3</sup> )	Comments
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics		1200	-	CEFIC-HSPA
2-Ethylhexyl nitrate		7,16	7,16	IUCLID
Solvent naphtha (petroleum), light aromatic		100	-	
1,2,4-Trimethylbenzene	GB	125	-	
1,2,4-Trimethylbenzene	EC	100	-	
Mesitylene	GB	125	-	
Mesitylene	EC	100	-	
Kerosine (petroleum)		575	-	CEFIC-HSPA
Xylene (mixed isomers)	GB	220	441	Skin, BMGV
Xylene (mixed isomers)	EC	221	442	Skin
Cumene	GB	125	250	Skin
Cumene	EC	100	250	Skin
Naphthalene	EC	50	-	

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Ethylhexyl nitrate	Dermal				1 mg/kg bw/day
	Inhalation				0,35 mg/m <sup>3</sup>
1,2,4-Trimethylbenzene	Dermal				16171 mg/kg bw/day
	Inhalation	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>
Mesitylene	Dermal		29,4 mg/kg bw		16171 mg/kg bw/day
	Inhalation		100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>
Xylene (mixed isomers)	Dermal				180 mg/kg bw/day
	Inhalation		289 mg/m <sup>3</sup>		77 mg/m <sup>3</sup>
Naphthalene	Dermal				3,57 mg/kg bw/day
	Inhalation			25 mg/m <sup>3</sup>	25 mg/m <sup>3</sup>

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Ethylhexyl nitrate	Dermal				0,52 mg/kg bw/day
	Inhalation				0,087 mg/m <sup>3</sup>
	Oral				0,025 mg/kg bw/day
1,2,4-Trimethylbenzene	Dermal				9512 mg/kg bw/day
	Inhalation	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>
	Oral				15 mg/kg bw/day
Mesitylene	Dermal				9512 mg/kg bw/day

Xylene (mixed isomers)	Inhalation			29,4 mg/m <sup>3</sup>
	Oral			15 mg/kg bw/day
	Dermal			108 mg/kg bw/day
	Inhalation	174 mg/m <sup>3</sup>	174 mg/m <sup>3</sup>	14,8 mg/m <sup>3</sup>
	Oral			1,6 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
2-Ethylhexyl nitrate	Water	0,0008 mg/l	0,00008 mg/l	
	Sediment	0,00074 mg/kg	0,00074 mg/kg	
	STP			10 mg/l
	Soil			0,000191 mg/kg
1,2,4-Trimethylbenzene	Water	0,12 mg/l	0,12 mg/l	
	Sediment	13,56 mg/kg	13,56 mg/kg	
	Intermittent water			0,12 mg/l
	STP			2,41 mg/l
Mesitylene	Soil			2,34 mg/kg
	Water	0,101 mg/l	0,101 mg/l	
	Sediment	7,86 mg/kg	7,86 mg/kg	
	Intermittent water			0,101 mg/l
Xylene (mixed isomers)	STP			2,02 mg/l
	Soil			1,34 mg/kg
	Water	0,327 mg/l	0,327 mg/l	
	Sediment	12,46 mg/kg	12,46 mg/kg	
Naphthalene	Intermittent water			0,327 mg/l
	STP			6,58 mg/l
	Soil			2,31 mg/kg
	Water	0,0024 mg/l	0,0024 mg/l	
	Sediment	0,0672 mg/kg	0,0672 mg/kg	
	Intermittent water			0,02 mg/l
	STP			2,9 mg/l
	Soil			0,0533 mg/kg

## 8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required for momentary use. Wear suitable protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345 in case of frequent or prolonged use and in case of large scale exposure. Suitable material: nitril. Indication of permeation breakthrough time: not known.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. ± 0,5 mm. Indication of permeation breakthrough time: not known.

Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1. Information on basic physical and chemical properties

Appearance : Liquid.

Colour	: Colourless.	
Odour	: Aromatic.	
Odour threshold	: Not known.	
pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	
Flash point	: 70 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 215 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: Not known.	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,6 ( Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics )
	:	Upper explosion limit in air (%): 7 Solvent naphtha (petroleum), light aromatic
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: 15 mm <sup>2</sup> /sec	
Vapour pressure (20°C)	: Not known.	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 0,9 g/ml	
Evaporation rate	: Not known.	(n-butyl acetate = 1)

**SECTION 10 STABILITY AND REACTIVITY**

**10.1. Reactivity**

Reactivity : See sub-sections below.

**10.2. Chemical stability**

Stability : Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Reactivity : No other hazardous reactions known.

**10.4. Conditions to avoid**

Conditions to avoid : Risk of explosion if heated under confinement. See section 7.

**10.5. Incompatible materials**

Materials to avoid : Keep away from oxidizing agents.

**10.6. Hazardous decomposition products**

Hazardous decomposition products : Not known.

**SECTION 11 TOXICOLOGICAL INFORMATION**

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**11.1. Information on toxicological effects**

No toxicological research has been carried out on this product.  
Inhalation



- Acute toxicity : Calculated LC50: > 6,191 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause headache, dizziness and a feeling of sickness.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Skin contact**
- Acute toxicity : Calculated LD50: > 2650 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.
- Sensitisation : Does not contain skin sensitisers. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Eye contact**
- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
- Ingestion**
- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. If swallowed, if any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 38.3° C, shortness of breath, chest congestion or continued coughing or wheezing. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, stomachache, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.
- Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	NOAEL (development) - estimate	Not teratogenic	----	----
	NOAEL (fertility) - estimate	Not reprotoxic	----	----
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Skin irritation	Non-irritant	OECD 404	Rabbit
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin sensitisation	Not sensitizing	OECD 406	----
	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3	----	----
	LC50 (inhalation)	> 4950 mg/m3	OECD 403	Rat
	NOAEL (inhalation) - estimate	> 2200 mg/m3	Read across	Rat
	NOAEL (oral) - estimate	> 5500 mg/kg bw/d	Read across	Rat



Solvent naphtha (petroleum), light aromatic	Mutagenicity - estimate	Not mutagenic	Read across	
	Respiratory irritation - estimate	Non-irritant		
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	NOAEL (developmental toxicity, inh.)	> 23900 mg/m3	OECD 414	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	NOAEL (inhalation)	1402 mg/m3	OECD 453	Rat
	NOAEL (fertility, inh.)	> 20000 mg/m3	OECD 416	Rat
	NOAEL (dermal)	> 40 mg/kg bw/d	OECD 453	Mouse
	Mutagenicity	Not mutagenic		Salmonella typhimurium
	Skin irritation	Mildly irritant		
	Eye irritation - estimate	Non-irritant		
	NOAEL (fertility) - estimate	Not reprotoxic		
	LC50 (inhalation) - estimate	5310 mg/m3	Read across	Rat
1,2,4-Trimethylbenzene	LD50 (dermal)	> 3500 mg/kg bw	OECD 402	Rat
	LD50 (oral)	8400 mg/kg bw	----	Rat
	LD50 (oral)	6000 mg/kg bw		Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	LC50 (inhalation)	2842 mg/m3	----	Mouse
	LD50 (dermal) - estimate	> 3440 mg/kg bw	Read across	Rat
	NOAEL (oral) - estimate	600 mg/kg bw/d	Read across	Rat
	NOAEL (inhalation)	1230 mg/m3	OECD 413	Rat
	Skin irritation - estimate	Irritant	Read across	Rabbit
	Skin sensitisation - estimate	Not sensitizing	Read across	Guinea pig
	NOAEL (developmental toxicity, inh.)	1470 mg/m3	OECD 414	Rat
	Skin sensitisation - estimate	Not sensitizing	Read across	Guinea pig
	NOAEL (developmental toxicity, inh.)	5900 mg/m3	OECD 414	Rat
	NOAEL (oral)	600 mg/kg bw/d	OECD 408	Rat
Mesitylene	Genotoxicity - in vivo	> 3600 mg/kg bw/d	OECD 474	Mouse
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Eye irritation	Mildly irritant	----	Rabbit
	Skin irritation	Moderately irritant	----	Rabbit
	NOAEL (inhalation)	1800 mg/m3	OECD 452	Rat
	LC50 (inhalation)	24000 mg/m3		Rat
	LD50 (oral)	5000 mg/kg bw	----	Rat
	LD50 (oral)	> 5000 mg/kg bw	----	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin irritation	Irritant	OECD 404	Rabbit
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	LC50 (inhalation)	> 5280 mg/m3	OECD 403	Rat
Kerosine (petroleum)	Eye irritation	Non-irritant		Rabbit
	NOAEL (oral)	750 mg/kg bw/d	----	Rat
	NOAEL (inhalation)	> 1000 mg/m3	OECD 413	Rat
	NOAEL (dermal)	> 0,5 mg/kg bw/d	OECD 410	Rat

Genotoxicity - in vivo NOAEL (fertility, oral) NOAEL (development, oral)	Not genotoxic > 494 mg/kg bw/d 1000 mg/kg bw/d	OECD 475 OECD 421 OECD 414	Rat Rat Rat
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**SECTION 12 ECOLOGICAL INFORMATION** \*

**12.1. Toxicity**

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Toxic to aquatic organisms. Calculated LC50 (fish): 5 mg/l. Calculated EC50 (waterflea): 6 mg/l.  
Contains 0 % of components with unknown hazards to the aquatic environment. May form an oil film on the water surface causing a decline in oxygen content with possible adverse effects for aquatic organisms.

**12.2. Persistence and degradability**

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

**12.3. Bioaccumulative potential**

Bioaccumulative potential : Contains bioaccumulating substances.

**12.4. Mobility in soil**

Mobility : Adsorbs to soil and has low mobility. Floats on water.

**12.5. Results of PBT and vPvB ass**

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

**12.6. Other adverse effects**

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
2-Ethylhexyl nitrate	LC50 (fish)	2 mg/l	OECD 203	Brachydanio rerio
	IC50 (alga)	3,26 mg/l	OECD 201	Pseudokirchnerella subcapitata
	NOEC (fish)	1,52 mg/l		Brachydanio rerio
	EC50 (waterflea)	> 12,6 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	0 %		
	Log P(ow)	4,1400		
Solvent naphtha (petroleum), light aromatic	EC50 (waterflea)	> 1 mg/l	----	----
	NOEC (daphnids) - estimate	> 1 mg/l.d		
	NOEC (fish) - estimate	> 1 mg/l.d		
	LC50 (fish)	> 1 mg/l	----	----
	IC50 (alga)	> 1 mg/l	----	----
	Log P(ow)	> 3		
1,2,4-Trimethylbenzene	LC50 (fish)	7,72 mg/l		Pimephales promelas
	EC50 (waterflea)	3,6 mg/l		Daphnia magna
	IC50 (alga) - estimate	2,356 mg/l		
	Ultimate aerobic biodegradation (%)	> 60 %		
	Log P(ow)	3,8000		
	BCF	275		

Mesitylene	LC50 (fish)	3,48 mg/l		Pimephales promelas
	EC50 (waterflea)	50 mg/l		Daphnia magna
	Log P(ow)	3,4		
	BCF	> 32		
Kerosine (petroleum)	NOEC (waterflea) - chronic	0,48 mg/l.d	OECD 211	Daphnia magna
	NOEC (waterflea) - acute	0,3 mg/l	OECD 202	Daphnia magna
	EC50 (waterflea)	1,4 mg/l	OECD 202	-----
	LC50 (fish)	> 1 mg/l		-----
Cumene	IC50 (alga)	> 1 mg/l		-----
	EC50 (waterflea)	4 mg/l	-----	Daphnia magna
	Primary aerobic biodegradation (%)	13 %		
	NOEC (fish)	1,9 mg/l.d	-----	Oncorhynchus mykiss
	IC50 (alga)	2,6 mg/l	OECD 201	Selenastrum capricornutum
Naphthalene	LC50 (fish)	4,7 mg/l	-----	Cyprinodon variegatus
	Log P(ow)	3,6000		
	BCF	35,5		
	EC50 (waterflea)	2,16 mg/l		Daphnia magna
	LC50 (fish)	0,51 mg/l		
	NOEC (fish)	0,12 mg/l.d		
	Log P(ow)	3,4000		
	BCF	427		

### SECTION 13 DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

- Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.
- Additional warning : None.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

### SECTION 14 TRANSPORT INFORMATION

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#### 14.1. UN number

UN nr. : UN 3082

#### 14.2. UN proper shipping name

Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( 2-Ethylhexyl nitrate ; Solvent naphtha (petroleum), light aromatic )

Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( 2-Ethylhexyl nitrate ; Solvent naphtha (petroleum), light aromatic )

#### 14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : 9  
Classification code : M6  
Packaging group : III

Danger label : 9  
Tunnel restriction code : C/D



Other information : Not intended for carriage by tank-vessels on inland waterways. This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (Special provisions 375).

**IMDG (sea)**

Class : 9  
Packaging group : III  
EmS (fire / spill) : F - A / S - F  
Marine pollutant : Yes  
Other information : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (IMDG code 37-14, 2.10.2.7).

**IATA (air)**

Class : 9

**14.6. Special precautions for user**

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

**SECTION 15 REGULATORY INFORMATION**

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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

**15.2. Chemical safety assessment**

Chemical safety assessment : Not applicable.

**SECTION 16 OTHER INFORMATION**

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**16.1. Other information**

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (\*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2	: Calculation method
Asp. Tox. 1	: Calculation method
Aquatic Chronic 2	: Calculation method

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	: Flammable liquid, hazard category 3.
Acute Tox. 4	: Acute toxicity, category 4.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Irrit. 2	: Eye irritation, category 2.
Carc. 2	: Carcinogen, category 2.
STOT SE 3	: Specific target organ toxicity after single exposure, category 3.
STOT RE 2	: Specific target organ toxicity — repeated exposure, category 2.
Asp. Tox. 1	: Aspiration hazard, category 1.
Aquatic Chronic 1	: Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	: Hazardous to the aquatic environment — Chronic category 2.
Aquatic Acute 1	: Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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.

Number format : "," used as decimal separator.

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End of safety data sheet.