

# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

## XO1964D

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

#### 1.1 Product identifier

<b>Product name:</b>	XO1964D
<b>Trade name(s):</b>	Exocet Diesel Supreme
<b>Product description:</b>	Liquid fuel additive.
<b>Contain(s)</b>	2-ethylhexyl nitrate Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics 2-Ethylhexan-1-ol Hydrocarbons, C10 aromatics, >1% naphthalene Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane

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

<b>Identified use(s):</b>	Liquid fuel additive.
<b>Uses advised against:</b>	Follow supplier's recommendations on correct use of the product.

#### 1.3 Details of the supplier of the safety data sheet

<b>Manufacturer/Supplier:</b>	Fuel Additive Science Technologies Limited Unit 29, Atcham Business Park, Upton Magna, Shrewsbury, Shropshire, SY4 4UG
<b>Telephone:</b>	+44 (0)1743 761 415
<b>E-mail:</b>	info@fastexocet.co.uk

#### 1.4 Emergency telephone number

<b>In case of emergency, call:</b>	+44 (0) 333 333 9962 (24/7)
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## SECTION 2: Hazard Identification

### 2.1 Classification of the substance or mixture

#### 2.1.1. Classification according to Regulation (EC) No. 1272/2008 (CLP)

Acute Tox. 4 H302  
Acute Tox. 4 H332  
Asp. Tox. 1 H304  
Carc. 2 H351  
Aquatic Chronic 2 H411

#### 2.1.2. Additional Information

EUH044  
EUH066  
EUH208

### 2.2 Label elements

#### 2.2.1. Label according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictogram(s):



**Signal Word:** Danger.

**Hazard Statement(s):** H302+H332: Harmful if swallowed or by inhalation.  
H304: May be fatal if swallowed and enters airways.  
H351: Suspected of causing cancer.  
H411: Toxic to aquatic life with long lasting effects.

**Precautionary Statement(s):** P202 Do not handle until all safety precautions have been read and understood.  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.  
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P331: Do NOT induce vomiting.

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## Supplemental Hazard information (EU):

P405: Store locked up.  
P501: Dispose of contents/container in accordance with local, state or national legislation.

EUH044: Risk of explosion if heated under confinement.  
EUH066: Repeated exposure may cause skin dryness or cracking.  
EUH208: Contains phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane. May produce an allergic reaction.

## Hazard Determining Component(s)

2-ethylhexyl nitrate.  
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics.  
2-Ethylhexan-1-ol.  
Hydrocarbons, C10 aromatics, >1% naphthalene  
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane

## 2.3 Other hazards

The product is not PBT or vPvB.

## SECTION 3: Composition

### 3.2 Mixtures

Chemical name	% w/w	CAS No. / EC No. / Index No.	REACH Registration No.	Classification (Regulation (EC) No. 1272/2008 (CLP))	NOTES – SCL / ATE / M-factor
2-Ethylhexyl nitrate	30 - < 50	27247-96-7 / 248-363-6 / -	01-2119539586-27-XXXX	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Aquatic Chronic 2; H411 EUH044 EUH066	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	5 - < 25	- / 918-481-9 / -	01-2119457273-39-XXXX	Asp. Tox.1; H304 EUH066	
2-Ethylhexan-1-ol	2- < 9	104-76-7 / 203-234-3 / -	01-2119487289-20-XXXX	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory Tract, Inhalation)	

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Chemical name	% w/w	CAS No. / EC No. / Index No.	REACH Registration No.	Classification (Regulation (EC) No. 1272/2008 (CLP))	NOTES – SCL / ATE / M-factor
Distillates (petroleum). Hydrotreated heavy paraffinic	< 5	- / 265-157-1 / 649-467-00-8	01-2119484627-25-XXXX	Asp. Tox. 1 H304 Carc. 1B H350	Note L
Hydrocarbons, C10 aromatics, >1% naphthalene	< 5	- / 919-284-0 / -	01-2119463588-24-XXXX	Asp. Tox. 1 H304 Carc. 2 H351 STOT SE 3 H336 Aquatic Chronic 2 H411	
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane	< 1	68123-18-2 / 614-281-8 / -	-	Skin Irrit. 2 H315 Eye Irrit. 2 H319 Skin Sens. 1 H317 Aquatic Chronic 2 H411	
Naphthalene	< 1	91-20-3 / 202-049-5 / 601-052-00-2	-	Acute Tox 4; H302 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	M=1 M(chronic) = 1

## NOTES

NOTE L - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

EC numbers, 918-481-9, 919-284-0 and 68123-18-2 are numerical identifiers, provided for information purposes.

See Section 16 for full description of H statements.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

#### GENERAL NOTES

If medical advice is needed, have safety data sheet or label at hand.

If exposed or concerned, get medical advice.

#### INHALATION:

Remove person to fresh air and keep comfortable for breathing. Keep at rest. If symptoms persist, seek medical attention.

#### SKIN CONTACT:

Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs, get medical advice/attention.

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<b>EYE CONTACT:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing making sure to rinse under eyelids. If eye irritation persists, get medical advice/attention.
<b>INGESTION:</b>	Obtain immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person. Provided the patient is conscious, rinse mouth with water. Give small amounts of water to drink.
<b>SELF-PROTECTION OF THE FIRST AIDER:</b>	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

## 4.2 Most important symptoms and effects, both acute and delayed:

Skin contact may cause redness and pain. Repeated exposure may cause skin dryness or cracking. May produce an allergic reaction.  
Eye contact causes watering, redness and pain.  
Inhalation of high concentrations of vapours may cause drowsiness or dizziness. If swallowed, aspiration into lungs may result in chemical pneumonia. Suspected of causing cancer.  
Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract.

## 4.3 Indication of any immediate medical attention and special treatments needed:

In case of accident or if patient feels unwell, seek medical advice immediately. If swallowed, patient should be monitored for signs of breathing difficulty as effects of aspiration may be delayed for up to 48 hours. If breathing is laboured, oxygen should be administered by qualified personnel.

### NOTES TO PHYSICIAN

Inhalation of vapours may cause a sharp decrease in blood pressure with resulting loss of consciousness.

## SECTION 5: Fire-fighting Measures

### 5.1 Extinguishing Media

<b>Suitable extinguishing media:</b>	Foam, CO <sub>2</sub> or dry powder. For large fires, use water spray.
<b>Unsuitable extinguishing media:</b>	Do not use water jet.

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## 5.2 Special hazards arising from the substance or mixture

Combustible liquid and vapour: Vapour may form explosive mixture with air. Vapour is heavier than air and may accumulate in confined spaces.

Risk of explosion if heated under confinement. Containers exposed to heat may burst due to increase in pressure. 2-ethylhexyl nitrate decomposes violently when heated above 100 °C.

Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides, various hydrocarbons.

## 5.3 Advice for fire-fighters

Evacuate the area. Fight the fire from a protected location.

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Move undamaged containers from fire area if this can be done safely. Keep fire exposed containers cool by spraying with water.

Fire water contaminated with this material must be contained. Do not allow product or run-off to enter drains, sewers or watercourses.

## SECTION 6: Accidental Release Measures

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

#### 6.1.1 For non-emergency personnel

Eliminate sources of ignition. Ensure adequate ventilation. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces. Do not breathe fumes/vapour. Evacuate area and keep upwind. Avoid contact with skin, eyes or clothing. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate. (See Section 8).

#### 6.1.2 For emergency responders

Keep unnecessary personnel away. Eliminate sources of ignition. Ensure adequate ventilation. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces. Do not breathe fumes/vapour. Evacuate area and keep upwind. Avoid contact with skin, eyes or clothing. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate. (See Section 8). Wash contaminated clothing before reuse.

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## 6.2 Environmental precautions

Collect spillage. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

## 6.3 Methods and materials for containment and cleaning up

### 6.3.1 For containment

Stop the leak if it is safe to do so. Contain the spillage with sand, earth or any suitable adsorbent material.

### 6.3.2 For cleaning up

Use sand, earth or any suitable non-combustible adsorbent material to adsorb spillages. Using non-sparking tools transfer the contaminated adsorbent material into a UN approved container for disposal. The containers used should be plastic-lined sealable drums. Containers should be sealed before being disposed of via an authorised waste disposal contractor.

### 6.3.3 Other advice

None.

## 6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Precautions for safe handling

Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including local extraction, to ensure occupational exposure limits are not exceeded. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Wear suitable personal protective equipment (See Section 8).

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Contaminated clothing should be thoroughly cleaned or disposed of as hazardous waste.

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## 7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep cool. Protect from direct sunlight. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store only in the original container. Empty containers retain product residue and can be hazardous.

Keep away from oxidising agents.

## 7.3 Specific end uses(s)

Liquid fuel additive.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Workplace exposure limits

<b>Substance</b>	Naphthalene		<b>CAS No.</b>		91-20-3
<b>Country</b>	Limit value - 8 hours		Limit value - short term*		Source
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
EU	10	50			GESTIS ILV
UK	[10]	[53]	[15]	[80]	GESTIS ILV
<b>Remarks</b>					
EU	Indicative Occupational Exposure Limit Values, Directive 2009/161/EU				
UK	The UK Advisory Committee on Toxic Substances has expressed concern that, for the OELs shown in parentheses, health may not be adequately protected because of doubts that the limit was not soundly-based. These OELs were included in the published UK 2002 list and its 2003 supplement, but are omitted from the published 2005 list.				
<b>Substance</b>	2-Ethylhexan-1-ol		<b>CAS No.</b>		104-76-7
<b>Country</b>	Limit value - 8 hours		Limit value - short term*		Source
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
UK	1	5.4			UK EH40/2005 4 <sup>th</sup> edition, 2020
EU	1	5.4			GESTIS ILV
<b>Remarks</b>					
EU	Indicative Occupational Exposure Limit Values, Directive 2006/15/EC				



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<b>Substance</b>	Hydrocarbons, C10, aromatics				
Country	Limit value - 8 hours		Limit value - short term*		Source
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
EU	-	151	-	-	Supplier's SDS
<b>Remarks</b>					
EU	EU HSPA (RCP Aromatic solvents 180 – 215)				
* Short term is 15 minutes unless otherwise specified.					

## Biological Monitoring Guidance Values (BMGVs)

Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Polycyclic aromatic hydrocarbons (PAHs)	91-20-3	Post shift	urine		4 µmol 1-hydroxypyrene/mol creatinine in urine	

## DNELs (Workers)

Substance	Route	Acute/short-term exposure		Long-term exposure	
		Systemic effects	Local effects	Systemic effects	Local effects
2-Ethylhexyl nitrate	Inhalation	No-threshold effect and/or no dose-response information available	No data available: testing technically not feasible	0.35 mg/m <sup>3</sup>	No data available: testing technically not feasible
	Dermal	No-threshold effect and/or no dose-response information available.		1 mg/kg bw/day	0.044 mg/cm <sup>2</sup>
Hydrocarbons, C10, aromatics, >1% naphthalene	Inhalation	No-threshold effect and/or no dose-response information available		151 mg/m <sup>3</sup>	No-threshold effect and/or no dose-response information available
	Dermal			12.5 mg/kg bw/day	
2-Ethylhexan-1-ol	Inhalation	Low hazard	53.2 mg/m <sup>3</sup>	12.8 mg/m <sup>3</sup>	53.2 mg/m <sup>3</sup>
	Dermal	Medium hazard	Medium hazard	23 mg/kg bw/day	Medium hazard.
Distillates (petroleum), hydrotreated heavy paraffinic	Inhalation	No hazard identified	No hazard identified	2.73 mg/m <sup>3</sup>	5.58 mg/m <sup>3</sup>
	Dermal	No hazard identified	No hazard identified	0.97 mg/kg bw/day	High hazard
Naphthalene	Inhalation	Low hazard	Low hazard	25 mg/m <sup>3</sup>	25 mg/m <sup>3</sup>
	Dermal	No hazard identified	No hazard identified	3.57 mg/kg bw/day	Low hazard

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## PNECs

Substance	Aqua (fresh water)	Aqua (marine water)	Aqua (intermittent releases)	Sewage Treatment Plants	Sediment (fresh water)	Sediment (marine water)	Soil	Oral
2-Ethylhexyl nitrate	0.0008 mg/L	0.00008 mg/L	-	10 mg/L	0.00074 mg/kg sediment dw	0.00074 mg/kg sediment dw	0.000191 mg/kg soil dw	-
2-Ethylhexan-1-ol	0.017 mg/L	0.0017 mg/L	0.17 mg/L	10 mg/L	0.28 mg/kg sediment dw	0.028 mg/kg sediment dw	0.047 mg/kg soil dw	55 mg/kg food
Naphthalene	0.0024 mg/L	0.0024 mg/L	0.002 mg/L	2.9 mg/L	0.0672 mg/kg sediment dw	0.0672 mg/kg sediment dw	0.0533 mg/kg soil dw	-

Hydrocarbons, C10, aromatics, > 1% naphthalene: No data available: testing technically not feasible.

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Provide adequate ventilation, including local extraction, to minimise exposure to vapours.

### 8.2.2 Personal protection

#### Eye protection:

Goggles or safety glasses with side shields giving complete protection to eyes. (EN 166)

#### Skin protection:

##### Hand protection:

Chemical resistant gloves (EN 374). Viton gloves are recommended. Contact glove supplier to confirm suitable glove material, thickness and breakthrough times.

##### Other:

Long sleeve protective clothing. Plastic apron. Rubber boots.

#### Respiratory protection:

In the case of insufficient ventilation, wear respiratory equipment suitable for organic gases and vapours with a boiling point above 65°C. Filter type A (EN 14387)

#### Thermal hazards:

Wear suitable temperature resistant gloves and protective clothing if the product is heated.

#### Environmental exposure controls

Inform environmental manager of all incidents involving this product.

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## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Brown liquid
<b>Odour:</b>	Hydrocarbon.
<b>Odour threshold:</b>	Not available.
<b>pH:</b>	Not applicable.
<b>Melting/freezing point:</b>	Not available. 2-Ethylhexyl nitrate: < -50°C
<b>Initial boiling point and boiling range:</b>	Not available. 2-Ethylhexyl nitrate: > 100°C (decomposes)
<b>Flash point:</b>	Product: 63 °C 2-Ethylhexyl nitrate: 76.1°C [Pensky-Martens. ASTM D93 ISO 2719]
<b>Evaporation rate:</b>	Not available. 2-Ethylhexyl nitrate: < 1 (butyl acetate = 1)
<b>Flammability (solid; gas):</b>	Not applicable.
<b>Upper/lower flammability or explosive limits:</b>	Not available. 2-Ethylhexyl nitrate: Lower: 0.25%
<b>Vapour pressure:</b>	Not available. 2-Ethylhexyl nitrate: 0.03 kPa (0.2 mm Hg) (20°C)
<b>Vapour density:</b>	> 1 (Air = 1)
<b>Relative density:</b>	0.94 (Water = 1)
<b>Solubility(ies):</b>	Very slightly soluble in water.
<b>Partition coefficient: n-octanol/water:</b>	Not available. 2-Ethylhexyl nitrate: Log Pow: 3.74 – 5.24
<b>Auto-ignition temperature:</b>	Not available. 2-Ethylhexyl nitrate: 130 - 215°C
<b>Decomposition temperature:</b>	Not available. 2-Ethylhexyl nitrate: > 100°C

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<b>Viscosity:</b>	Not available. 2-Ethylhexyl nitrate: Dynamic: 1.7 mPa.s Kinematic: 1.3 cSt (40°C)
<b>Explosive properties:</b>	Not explosive. Risk of explosion if heated under confinement. Vapour may form explosive mixture in air.
<b>Oxidising properties:</b>	Not oxidising.
<b>9.2 Other information</b>	None.

## SECTION 10: Stability and Reactivity

<b>10.1 Reactivity</b>	Reacts with oxidising agents.
<b>10.2 Chemical stability</b>	Stable under normal conditions. Risk of explosion if heated under confinement.
<b>10.3 Possibility of hazardous reactions</b>	No hazardous reactions expected during normal use.
<b>10.4 Conditions to avoid</b>	Keep away from sources of ignition, heat, hot surfaces, direct sunlight. Contact with incompatible materials.
<b>10.5 Incompatible materials</b>	Oxidising agents.
<b>10.6 Hazardous decomposition products</b>	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides and various hydrocarbons.

## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects

<b>Acute Toxicity – oral</b>	Harmful if swallowed.  ATE(mix): 300 – 2000 mg/kg.
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**Acute Toxicity – dermal** Not classified. Based on the available data the classification criteria are not met.

ATE(mix) > 2000 mg/kg.

**Acute Toxicity – inhalation** Harmful if inhaled.

ATE (vapours, mix): 10 – 20 mg/l

The following data are for the relevant product components.

Component	Acute Toxicity - oral	Acute Toxicity - dermal	Acute Toxicity - inhalation
2-ethylhexyl nitrate(*)	LD50 (rat) > 9.6 g/kg	LDL0 > 4.8 g/lg	Data not reliable
2-Ethylhexan-1-ol	LD50 (rat) 2047 mg/kg	LD50 (rat) > 3000 mg/kg	LC50 (rat,4h) 0.89 mg/L
naphthalene	LD50 (mouse) 533- mg/kg		LC50 (rat, vapour) > 77.7 ppm

(\*) Classified as Acute Tox. 4 H302+H312+H332 based on human data for 2-ethylhexyl nitrate, effects include severe headaches, nausea and giddiness.

**Skin corrosion/irritation** Repeated exposure may cause skin dryness or cracking.

**Serious eye damage/irritation** Not classified. Based on the available data the classification criteria are not met.

**Skin sensitisation** Contains phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane. May produce an allergic reaction.

**Respiratory sensitisation** Not classified. The product does not contain substances classified as respiratory sensitisers above the classification thresholds.

**Germ cell mutagenicity** Not classified. The product does not contain substances classified as mutagenic above the classification thresholds.

**Carcinogenicity** Suspected of causing cancer.

**Reproductive toxicity** Not classified. The product does not contain substances classified for reproductive toxicity above the classification thresholds.

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<b>Specific Target Organ Toxicity – single exposure</b>	Not classified. The product does not contain substances classified for specific target organ toxicity after a single exposure above the classification thresholds.
<b>Specific Target Organ Toxicity – repeated exposure</b>	Not classified. The product does not contain substances classified for specific target organ toxicity after repeated exposure above the classification thresholds.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.

## Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled. Suspected of causing cancer.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking. May produce an allergic reaction
<b>Eye contact</b>	Not classified. However, eye contact may cause watering, redness and pain.
<b>Ingestion</b>	Harmful if swallowed. May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia. Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Skin contact - repeated exposure may cause skin dryness or cracking. May produce an allergic reaction. Eye contact causes watering, redness and pain. Inhalation of high concentrations of vapours may cause drowsiness or dizziness. If swallowed, aspiration into lungs may result in chemical pneumonia. Ingestion may cause discomfort and irritation to the mouth and gastrointestinal tract. Harmful if inhaled. Suspected of causing cancer.
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<b>Mixture versus substance information</b>	No data available.
<b>Other information</b>	None.

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## SECTION 12: Ecological Information

<b>12.1 Toxicity</b>	Toxic to aquatic life with long lasting effects.
No data available on the mixture. The following data are for the product components:	
2-Ethylhexyl nitrate:	LC <sub>50</sub> ( <i>Danio rerio</i> ): 2 mg/L, 96 h EC <sub>50</sub> ( <i>Daphnia magna</i> ): > 12.6 mg/L, 48 h EC <sub>50</sub> ( <i>Pseudokirchnerella subcapitata</i> ): 3.22 mg/L, 72 h (growth rate) EC <sub>50</sub> ( <i>Pseudokirchnerella subcapitata</i> ): 1.57 mg/L, 72 h (yield)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:	LL <sub>50</sub> ( <i>Oncorhynchus mykiss</i> ): > 1000 mg/L, 96 h LL <sub>50</sub> ( <i>Chaetogammarus marinus</i> ): > 1000 mg/L, 96 h EL <sub>50</sub> ( <i>Pseudokirchnerella subcapitata</i> ): > 1000 mg/L, 72 h (biomass) EL <sub>50</sub> ( <i>Pseudokirchnerella subcapitata</i> ): >1000 mg/L, 72 h (growth rate)
2-Ethylhexan-1-ol	LC <sub>50</sub> ( <i>Leuciscus idus</i> ): 17.1 mg/L, 96h EC <sub>50</sub> ( <i>Daphnia magna</i> ): 39 mg/L, 48h LC <sub>50</sub> ( <i>Scenedesmus subspicatus</i> ): 16.6 mg/L
Naphthalene:	LC <sub>50</sub> ( <i>Oncorhynchus mykiss</i> ): 1.6 mg/L, 96 h EC <sub>50</sub> ( <i>Daphnia magna</i> ): 2.16 mg/L, 48 h EC <sub>50</sub> ( <i>Pseudokirchnerella subcapitata</i> ): 2.96 mg/L, 4h NOEC ( <i>Oncorhynchus kisutch</i> ): 0.37 mg/L, 40 days NOEC ( <i>Daphnia pulex</i> ): 0.6 mg/L, 125 days
<b>12.2 Persistence and degradability</b>	The product is expected to be not biodegradable.
No data available on the mixture. The following data are for the product components:	
2-Ethylhexyl nitrate:	Not readily biodegradable, 0% degradation after 28 days.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:	Readily biodegradable but failing 10-day window.
2-Ethylhexan-1-ol:	Readily biodegradable.
Naphthalene:	Readily biodegradable.

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<b>12.3 Bioaccumulative potential</b>	Not expected to bioaccumulate.
The following data are for the ingredients:	
2-Ethylhexyl nitrate	Not expected to bioaccumulate. Log Pow: 5.24 BCF: 1332
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:	Not expected to bioaccumulate.
2-Ethylhexan-1-ol	Low potential to bioaccumulate. Log Kow: 2.9 BCF: 38.06 L/kg wet weight (estimated)
<b>12.4 Mobility in soil</b>	Substances in this mixture are expected to distribute to air, soil and sediment.
The following data are for the ingredients:	
2-Ethylhexyl nitrate:	Log Koc (soil/water partition coefficient): 3.75 @ 22°C.
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics:	Volatile. Insoluble in water. Volatile.
2-Ethylhexan-1-ol	Adsorbs on to soil and sediment Low potential for adsorption.
<b>12.5 Results of PBT and vPvB assessment</b>	The product does not contain substances assessed to be PBT or vPvB.
<b>12.6 Other adverse effects</b>	None known.

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

Empty containers retain product residue and can be hazardous. Dispose of uncleaned empty containers as hazardous waste in accordance with local, state or national legislation.

Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor. Do not empty into drains; dispose of this material and its container in a safe way.



# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

## SECTION 14: Transport Information

### ADR

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes

### ADN

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes

### RID

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes

### IATA/ICAO

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes

# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

## IMDG

- |      |  |  |
|------|--|--|
| 14.1 | UN Number  | 3082   |
| 14.2 | UN Proper shipping name  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 2-ethylhexyl nitrate)  |
| 14.3 | Transport hazard class(es)   | 9  |
| 14.4 | Packing group  | III  |
| 14.5 | Environmental hazards  | Marine pollutant.  |
| 14.6 | Special precautions for the user   | Transport Category: 3<br>Tunnel Restriction Code: (-)<br>Read SDS and supplier instructions on correct use of the product. |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | The product is not intended to be transported in bulk.   |

## SECTION 15: Regulatory Information

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

#### EU Regulations

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP).

Authorisations and/or restrictions on use:

No substances in this product are listed on REACH Annex XIV or REACH Annex XVII.

Included in the CoRAP: 2-ethylhexan-1-ol (104-76-7) and Naphthalene (91-20-3)

### 15.2 Chemical Safety Assessment

Not applicable.

# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

## SECTION 16: Other Information

### i) Indication of changes:

<b>Version:</b>	5.0
<b>Issue date:</b>	16/11/2020
<b>Previous Version:</b>	4.0
<b>Issue date of previous version:</b>	31/01/2018
<b>Sections changed from previous version:</b>	1,2,3,4,5,6,7,8,9,11,12,14 and 16.

### ii) Abbreviations and acronyms:

BCF:	Bioconcentration factor
bw:	Body weight
CAS:	Chemical Abstracts Service
CoRAP	Community Rolling Action Plan
dw:	Dry weight
EINECS:	European Inventory of Existing Commercial Chemical Substances
EC <sub>50</sub> :	Effective Concentration 50%
EL <sub>50</sub> :	Effective Loading rate 50%
LC <sub>50</sub> :	Lethal Concentration 50%
LD <sub>50</sub> :	Lethal Dose 50%
LL <sub>50</sub> :	Lethal Loading rate 50%
LOEL:	Lowest Observed Effect Level
NOEL:	No Observed Effect Level
PBT:	Persistent, Bioaccumulative and Toxic.
vPvB:	Very Persistent and Very Bioaccumulative.
WAF:	Water Accommodated Fraction

### iii) References:

Supplier's Safety Data Sheets.  
Regulation (EC) No. 1272/2008.  
Regulation (EC) No. 1907/2006  
Regulation (EU) No. 2015/830  
HSE EH40/2005 (4<sup>th</sup> Edition, 2020)  
GESTIS ILV

# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

**iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP)**

Classification according to Regulation (EC) No. 1272/2008	Classification procedure
Acute Tox. 4 H302	Calculation
Acute Tox. 4 H332	Calculation
Carc. 2 H351	Calculation
Asp. Tox. 1 H304	Calculation
Aquatic Chronic 2 H411	Calculation

**v) Full text of relevant Hazard Category Codes and H-Statements:**

**Hazard Category Codes**

- Acute Tox. 4: Acute toxicity, Category 4
- Aquatic Acute 1: Hazardous to the aquatic environment, Acute, Category 1
- Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1
- Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2
- Asp. Tox. 1 : Aspiration hazard, Category 1
- Carc. 2 : Carcinogenicity, Category 2
- Eye Irrit. 2 : Serious eye damage/irritation, Category 2
- Flam. Liq. 3 : Flammable liquid, Category 3
- STOT SE 3\_H335 : Specific target organ toxicity — single exposure, Category 3
- STOT SE 3\_H336 : Specific target organ toxicity — single exposure, Category 3
- Skin Irrit. 2 : Skin corrosion/irritation, Category 2
- Skin Sens. 1A : Sensitisation — Skin, Category 1A

**Hazard Statement(s):**

- 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.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.

# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 as amended.

**Supplemental Hazard information (EU):**

H351: Suspected of causing cancer.  
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.  
EUH208

**vi) Training Advice**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.  
Always read the label, safety data sheet and product information before use.

**Disclaimer:**

THE INFORMATION PRESENTED HEREIN IS BELIEVED TO BE ACCURATE, BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM, IN ADVANCE OF NEED, THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.