

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

## XO1258GO

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

#### 1.1 **Product identifier**

Product name:	X01258GO
Trade name(s):	Gas Oil Conditioner (XO1258GO)
Product description:	Liquid fuel additive

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

	0
Identified use(s):	Liquid fuel additive.
	Additive for use by professional users only.
	The restriction for professional users no longer applies if the product is added to the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles);
Uses advised against:	Follow supplier's recommendations on correct use of the product. Additive not for consumer use.

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

Manufacturer/Supplier:	Fuel Additive Science Technologies Limited Unit 29, Atcham Business Park, Upton Magna, Shrewsbury, Shropshire, SY4 4UG
Telephone:	+44 (0)1743 761415
E-mail:	info@fastexocet.co.uk

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#### 1.4 Emergency telephone number

In case of emergency, call:

+44 (0) 333 333 9962 (UK number, 24 hours, 7 days)

### **SECTION 2: Hazard Identification**

#### 2.1 Classification of the substance or mixture

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

Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sen. 1; H317 Muta. 2; H341 Carc. 1B; H350 Asp. Tox. 1; H304 Aquatic Chronic 2; H411

#### **Additional Information**

EUH044 EUH066

See Section 16 for full description of H statements.

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



Hazard pictogram(s):

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	H315:	Causes skin irritation.
	H318:	Causes serious eye damage.
	H317:	May cause an allergic skin reaction.
	H341:	Suspected of causing genetic defects.
	H350:	May cause cancer.
	H304:	May be fatal if swallowed and enters airways.
	H411:	Toxic to aquatic life with long lasting effects.
Precautionary Statement(s):	P201	Obtain special instructions before use.
	P261	Avoid breathing fume/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P305+P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/doctor.
	P331	Do NOT induce vomiting.
Supplemental Hazard information (EU):	EUH044: EUH066:	Risk of explosion if heated under confinement. Repeated exposure may cause skin dryness or cracking
Hazard Determining Component(s)	2-ethylhexyl n Hydrocarbons reaction produ hydroxypropy Phenol, 4,4'-( (chloromethyl	itrate s, C10 aromatics, >1% naphthalene ucts of paraformaldehyde and 2- lamine (ratio 3:2); [MBO] 1-methylethylidene)bis-, polymer with 2- )oxirane, 2-methyloxirane and oxirane
Special labelling of certain mixtures	Restricted to	professional users.

#### 2.3 Other hazards

This product is not PBT or vPvB.

## **SECTION 3: Composition**

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#### 3.2 Mixtures

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
2-ethylhexyl nitrate REACH #: 01-2119539586-27	50-60	27247-96-7	248-363-6	-	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	≤ 10	-	[918-481-9]	-	Flam. Liq. 3 H226 Asp. Tox. 1 H304 EUH066
Hydrocarbons, C10 aromatics, >1% naphthalene REACH #: 01-2119463588-25	≤ 8	64742-94-5 (*)	[919-284-0]	649-424-00-3	Asp. Tox. 1 H304
Phenol, 4-dodecyl-, polymer with 1,2-ethanediamine and formaldehyde, compd. with (dibutylamino)methanol	≤7	67953-82-6	[614-183-5]		Eye Irrit. 2 H319
Hydrocarbons, C10 aromatics, <1% naphthalene REACH #: 01-2119463583-34	< 5	64742-94-5 (*)	[918-811-1]		Asp. Tox. 1 H304 STOT SE 3 H336 Aquatic Chronic 2 H411 EUH066
2-Ethylhexan-1-ol REACH #: 01-2119487289-20	< 5	104-76-7	203-234-3		Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE3 H335
reaction products of paraformaldehyde and 2- hydroxypropylamine (ratio 3:2); [MBO]	< 5			612-290-00-1	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 3; H311 Skin Corr. 1B; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Muta. 2; H341 Carc. 1B; H350 STOT RE 2; H373 Aquatic Chronic 2; H411 EUH071
Phenol, 4,4'-(1- methylethylidene)bis-, polymer	< 2	68123-18-2	-	-	Skin Irrit. 2 H315 Eye Irrit. 2 H319

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Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
with 2-(chloromethyl)oxirane, 2- methyloxirane and oxirane					Skin Sens. 1 H317 Aquatic Chronic 3 H412
Distillates (petroleum). Hydrotreated heavy paraffinic REACH #: 01-2119484627-25	< 5		265-157-1		Asp. Tox. 1 H304 Carc. 1B H350 (Note L)
Hydrocarbons, C9, aromatics REACH #: 01-2119455851-35	< 1	128601-23-0 64742-95-6 (*)	[918-668-5]		Flam. Liq. 3 H226 Asp. Tox. 1 H304 STOT SE 3 H335 STOT SE 3 H336 Aquatic Chronic 2 H411
Naphthalene (+)	< 0.5	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

#### NOTES

(\*) Identified as CAS 64742-94-5 or CAS 64742-95-6 outside the EU.

(+) REACH Registration number: Not applicable. (Substance is a constituent of aromatic hydrocarbons.) EC Numbers 918-811-1, 918-481-9, 919-284-0 and 614-183-5 are technical identifiers and are displayed for informational purposes only.

Note L - Carc. 1B does not apply - substance contains less than 3 % DMSO extract.

See Section 16 for full description of H statements.

SECTION	4: First Aid	<b>Measures</b>
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#### 4.1 Description of first aid measures

GENERAL NOTES	If medical advice is needed, have the safety data she or label to hand. If exposed or concerned, obtain medical advice/attention immediately					
INHALATION:	Remove person to fresh air and keep comfortable for breathing. Keep at rest. If symptoms persist, seek medical attention.					
SKIN CONTACT:	Remove contaminated clothing immediately. Wash with plenty of soap and water. If irritation or rash occur, seek medical advice. Wash contaminated clothing before reuse.					



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EYE CONTACT:	Obtain medical attention immediately. Remove contact lenses if present and easy to do. Wash eyes immediately with plenty of water for at least 15 minutes.
INGESTION:	Obtain immediate medical attention. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Do NOT induce vomiting. If vomiting occurs naturally, the patient should lean forward to reduce the risk of aspiration.
SELF-PROTECTION OF THE FIRST AIDER:	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:

May be fatal if swallowed and enters airways. Causes serious eye damage. May cause an allergic skin reaction. Causes skin irritation. Harmful if swallowed, in contact with skin and if inhaled. Symptoms include severe headache, nausea and dizziness.

Symptoms of vasodilation may be present following organic nitrate over exposure.

Delayed effects: Suspected of causing genetic defects. May cause cancer.

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

Treat symptomatically. Seek immediate medical attention if swallowed, or in eyes. 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.

NOTE TO DOCTORS. Symptoms of vasodilation may be present following organic nitrate over exposure. Treat as organic nitrate poisoning.

### **SECTION 5: Fire-fighting Measures**

#### 5.1 Extinguishing Media

Suitable extinguishing media: Unsuitable extinguishing media:

Foam, CO2 or dry powder. Do not use water jet.

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

Combustible liquid and vapour.

Contains 2-ethylhexyl nitrate which is thermally unstable. Containers may rupture on heating. Cool containers exposed to flames with plenty of water until well after the fire is out. Fight any fire from a safe distance.

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

This material is harmful to aquatic life, fire water contaminated with the material must be contained. Do not empty into drains.

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

#### 5.3 Advice for fire-fighters

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

Evacuate area. Move containers from the fire area if it is safe to do so.

Fight any fire from a safe distance. Contains 2-ethylhexyl nitrate which is thermally unstable. Containers may rupture on heating. Cool containers exposed to flames with plenty of water until well after the fire is out.

Do not allow product or run-off to enter drains, sewers or watercourses.

Flash point:  $> 61^{\circ}C$  (closed cup).

### **SECTION 6: Accidental Release Measures**

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

#### 6.1.1 For non-emergency personnel

Evacuate surrounding areas. Eliminate sources of ignition. Ensure adequate ventilation. Do not touch or walk through spilt material. Avoid contact with skin, eyes or clothing. Do not breathe fumes/mist/vapours/spray. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate (see section 8). The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces.

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#### 6.1.2 For emergency responders

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

#### 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 clearing 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 non-combustible 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 absorbent material into a UN approved container for disposal. Containers should be sealed before being disposed of via an authorised waste disposal contractor.

#### 6.3.3 Other advice

Collect spillage. Avoid release to the environment.

#### 6.4 Reference to other sections

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

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### **SECTION 7: Handling and Storage**

#### 7.1 Precautions for safe handling

Avoid breathing fume/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including local extraction, to ensure occupational exposure limits are not exceeded.

Avoid contact with skin, eyes or clothing. Wear suitable personal protective equipment (See Section 8).

Eliminate all sources of ignition. Take precautionary measures against electrostatic discharges.

Keep away from heat. Do not heat above 100°C.

Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Avoid release to the environment.

Obtain special instructions before use. Avoid exposure during pregnancy. 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.

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

Keep away from heat and sources of ignition. Keep cool. Protect from direct sunlight. Protect from frost. 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.

Maximum recommended storage temperature: 40 °C

Keep away from oxidising agents.

#### 7.3 Specific end uses(s)

Liquid fuel additive.

Additive for use by professional users only.

The restriction for professional users no longer applies if the product is added to the following fuels and oil products:

- motor fuels which are covered by Directive 98/70/EC,

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- mineral oil products intended for use as fuel in mobile or fixed combustion plants,

- fuels sold in closed systems (e.g. liquid gas bottles);

Follow supplier's recommendations on correct use of the product.

## **SECTION 8: Exposure Controls/Personal Protection**

#### 8.1 Control parameters

#### Workplace exposure limits

Substance	8-hour TWA		STEL (15 min)		Source	Commonte
Substance	ppm	mg/m³	ppm	mg/m³		Comments
Hydrocarbons C10, aromatics, < 1% naphthalene; 64742-94-5		500			EH40	Total hydrocarbon vapour (1)
Hydrocarbons C10, aromatics, > 1% naphthalene; 64742-94-5		500			EH40	Total hydrocarbon vapour (1)
2-ethylhexan-1-ol	1	5.4			EH40	-
naphthalene	[10]	[53]	[15]	[80]	GESTIS ILV	UK*
Formaldehyde; 50-00-0	0.3	0.369	0.6	0.738	SCOEL/R EC/125	EU
Formaldehyde; 50-00-0	2	2.5	2	2.5	EH40	UK

#### Remarks

\* Short term is 15 minutes unless otherwise specified.

1 – Hydrocarbon solvents supplied as a complex mixture, HSE ACTS procedure, see EH40, paragraphs 84-87.

EU – Recommended.

The recommended EU limits may require a re-evaluation of risk control and exposure control measures. However, safe use levels remain possible with maximum exposure to formaldehyde vapours well below that of the new EU OEL.

UK - EH40:2005 3rd edition August 2018

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.

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#### **Derived No-Effect Level (DNELs) Workers**

Substances	Acute/short-term exposure		Long-term exposure			
Substances	Noule	Systemic effects	Local effects	Systemic effects	Local effects	
2-ethylhexyl nitrate	Inhalation	No data	available	0.35 mg/m <sup>3</sup>	No data available	
	Dermal	No data	available	1 mg/kg bw/day	44 µg/cm <sup>2</sup>	
	Eyes		Low h	nazard		
Hydrocarbons, C10-	Inhalation,		No hazaro	d identified		
C13, n-alkanes,	Dermal					
isoalkanes, cyclics,	and Eyes					
< 2% aromatics						
Hydrocarbons, C10	Inhalation	No data	available	151 mg/m <sup>3</sup>	No data available	
aromatics, >1%	Dermal	No data	available	12.5 mg/kg bw/day	No data available	
naphthalene						
Hydrocarbons, C10	Inhalation	No data a	available	151 mg/m <sup>3</sup>	No data available	
aromatics, <1%	Dermal	No data	available	12.5 mg/kg bw/day	No data available	
naphthalene						
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	No hazard identified	Medium hazard	23 mg/kg bw/day	Medium hazard	
	Eyes		Medium	n hazard		
Distillates	Inhalation	No hazard	l identified	2.7 mg/m <sup>3</sup>	5.6 mg/m <sup>3</sup>	
(petroleum),	Dermal	No hazard	lidentified	1 mg/kg bw/day	High hazard	
hydrotreated heavy	Eyes		No hazaro	d identified		
paraffinic	-					
Hydrocarbons, C9,	Inhalation	No data a	available	150 mg/m³	No data available	
aromatics	Dermal	No data	available	25 mg/kg bw/day	No data available	
Naphthalene	Inhalation	Low hazard	No hazard identified	25 mg/m <sup>3</sup>	25 mg/m <sup>3</sup>	
	Dermal	Low hazard	No hazard identified	3.57 mg/kg bw/day	No hazard identified	

#### **Predicted No Effect Concentration (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	0.8 µg/L	0.08 µg/L	No data available	10 mg/L	0.74 µg/kg sediment dw	0.74 µg/kg sediment dw	0.191 µg/kg soil dw	No data available
Hydrocarbons, C10-C13, n- alkanes, isoalkanes, cyclics, < 2% aromatics	No data avai	lable						
Hydrocarbons, C10, aromatics, >1% naphthalene	No data avai	lable						
Hydrocarbons, C10 aromatics, <1% naphthalene	No data avai	lable						

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Substance	Aqua (fresh water)	Aqua (marine water)	Aqua (intermittent releases)	Sewage Treatment Plants	Sediment (fresh water)	Sediment (marine water)	Soil	Oral
2-ethylhexan-1- ol	17 μg/L	1.7 μg/L	170 µg/L	10 mg/L	284 µg/kg sediment dw	28.4 µg/kg sediment dw	47 µg/kg soil dw	55 mg/kg food
Distillates (petroleum), hydrotreated heavy paraffinic	No data available							
Hydrocarbons, C9, aromatics	No data ava	ilable						
Naphthalene	2.4 µg/L	20 µg/L	2.4 μg/L	2.9 mg/L	67.2 μg/kg sediment dw	67.2 μg/kg sediment dw	53.3 μg/kg soil dw	No potential for bioaccu mulation

#### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate 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) or face shield.
Skin protection:	
Hand protection:	Chemical resistant gloves. (EN 374). Contact glove supplier to confirm suitable glove material, thickness and breakthrough times. If contact with forearms is likely, wear gauntlet-style gloves.
Other:	Long sleeve chemical resistant protective clothing. Plastic apron. Nitrile rubber boots.
Respiratory protection:	In the case of insufficient ventilation, wear respiratory equipment. Suitable respiratory protection for lower concentrations or short-term effect: Filter type ABEK-P3 (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

Appearance:	Brown liquid
Odour:	Pungent, aromatic.
Odour threshold:	Not available.
pH:	Not applicable.
Melting/freezing point:	Not available.
Initial boiling point and boiling range:	2-ethylhexyl nitrate: Decomposes > 100 °C
Flash point:	> 61°C (Closed cup)
Evaporation rate:	Not available.
Flammability (solid; gas):	Not applicable.
Upper/lower flammability or explosive limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	>1 (Air = 1).
Relative density:	Not available.
Solubility:	Very slightly soluble in water.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	2-ethylhexyl nitrate vapour: 130 °C.
Decomposition temperature:	2-ethylhexyl nitrate decomposes violently above 100°C.
Viscosity:	Not available.
Explosive properties:	Not explosive. Vapour may form explosive mixture in air. Risk of explosion if heated under confinement.
Oxidising properties:	Not oxidising.

9.2 Other information

None.

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SEC	SECTION 10: Stability and Reactivity			
10.1	Reactivity	Reacts with strong oxidising agents and strong acids.		
10.2	Chemical stability	Stable under normal conditions. Risk of explosion if heated under confinement. Decomposes when heated above 100 °C.		
10.3	Possibility of hazardous reactions	No hazardous reactions expected during normal use.		
		Hazardous reactions may occur if heated under confinement. Decomposes above 100 °C. Risk of explosion if heated under confinement.		
10.4	Conditions to avoid	Keep away from heat, sources of ignition, hot surfaces, direct sunlight and contact with incompatible materials. Protect from frost. Do not heat above 100°C.		
10.5	Incompatible materials	Acids, alkalis, reducing and oxidising agents, amines and phosphorus.		
10.6	Hazardous decomposition products	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides, formaldehyde and various hydrocarbons.		

### **SECTION 11: Toxicological Information**

#### **11.1** Information on toxicological effects

Acute toxicity – oral	Harmful if swallowed. (*)
Acute toxicity – dermal	Harmful in contact with skin. (*)
Acute toxicity - inhalation	Harmful if inhaled. (*)
	The following data are for the relevant product components:

Component	Acute Toxicity: oral:	Acute Toxicity:	Acute Toxicity:	
		dermal:	Inhalation:	
2-ethylhexyl nitrate (*)	LD50 >9.6 g/kg (rat)	LDL0 > 4.8 g/kg	Data not reliable	
2-ethylhexan-1-ol	LD50 2047 mg/kg (rat)	LD0 3000 mg/kg (rat)	LC50 (4 h) 890 - 5300	
			mg/m³ air (rat)	

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Reaction products of LI	050 630 mg/kg (	rat)	LD50 760 m	ng/kg (rat)	LC50 (4 h) 2 mg/l
paraformaldehyde and 2-				/	(dust/mist, rat)
hydroxypropylamine (ratio					
3:2); [MBO]					
(*) Classified as Acute Tox. 4 effects include severe headad	H302+H312+H3 hes, nausea an	332 bas d giddi	sed on huma ness.	an data for	2-ethylhexyl nitrate,
Skin corrosion/irritation	l	rritating cause s	g to skin. P skin dryness	rolonged of or cracking	r repeated exposure may g and dermatitis.
Serious eye damage/irritatio	on (	Causes	serious eye	e damage.	
Skin sensitisation	ſ	May ca	use an aller	gic skin rea	action.
	( 	Contair nydroxy (1-meth (chloroi	ns reaction p /propylamin nylethylidene methyl)oxira	oroducts of e (ratio 3:2) e)bis-, polyr ne, 2-meth	paraformaldehyde and 2- ); [MBO] and Phenol, 4,4'- ner with 2- yloxirane and oxirane.
Respiratory sensitisation	1	No evid	lence of res	piratory ser	nsitisation.
Germ cell mutagenicity	Ş	Suspec	ted of causi	ng genetic	defects.
	( H k	Contair nydroxy based ( 1272/2(	ns reaction p /propylamin on condition 008, Annex	oroducts of e (ratio 3:2) s cited in no VI, Part 3.	paraformaldehyde and 2- ); [MBO]. Classification ote 9, Regulation (EC)
Carcinogenicity	ſ	May ca	use cancer.		
	( H t	Contair nydroxy based ( 1272/2(	ns reaction p /propylamin on condition 008, Annex	oroducts of e (ratio 3:2) s cited in no VI, Part 3.	paraformaldehyde and 2- ); [MBO]. Classification ote 8, Regulation (EC)
Reproductive toxicity	1 0 0	Not clas classifie classifie	ssified. The ed for reproc cation thresh	product do ductive toxio nolds.	es not contain substances city above the
Specific Target Organ Toxic exposure	ity – single	Not clas	ssified. Bas cation criteri	ed on the a a are not m	available data the net.
	i4., N	Not cla	ssified Ras	ed on the s	vailable data the
Specific Target Organ Toxic repeated exposure	ity – 1	classific	cation criteri	a are not m	let.

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Information on likely routes of exposure	
Inhalation	Harmful if inhaled. Inhalation of vapour may cause severe headaches, nausea, dizziness and irritation to the respiratory tract. May cause cancer. Suspected of causing genetic defects.
Skin contact	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Prolonged or repeated exposure may cause skin dryness or cracking and dermatitis.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion may cause irritation to mouth, throat and digestive tract. Harmful if swallowed. May be fatal if swallowed and enters airways. Pneumonia may result if vomited material containing solvents reaches the lungs.
Symptoms related to the physical, chemical and toxicological characteristics	See above.

## **SECTION 12: Ecological Information**

12.1	Toxicity	The product is toxic to aquatic life with long lasting effects.
	Data for major components, if available:	
	2-ethylhexyl nitrate	LC50/96 h ( <i>Danio rerio</i> ): 2 mg/L
		EC50/48 h ( <i>Daphnia magna</i> ): >12.6 mg/L
		EC50/72 h (Pseudokirchneriella subcapitata) 3.22 mg/l
	Hydrocarbons, C10-C13, n-alkanes, isoalkanes,	LL50/96 h (Rainbow trout): >1000 mg/L
	cyclics, <2% aromatics	NOELR/28 d (freshwater fish, estimated): 0.101 mg/L
		LL50/48 h ( <i>Daphnia magna</i> ): >1000 mg/L
		EL50/72 h (Alga): >1000 mg/L
	Hydrocarbons, C10 aromatics, >1% naphthalene	LC50/96 h (Rainbow trout): 2-5 mg/l
	and Hydrocarbons, C10 aromatics, <1% naphthalene	EC50/48 h ( <i>Daphnia magna</i> ): 3-10 mg/l
		EC50/72 h (Selenastrum capricornutum): 1-3 mg/l
		EC50/48 h (Tetrahymena pyriformis): 1.7 mg/l
	2-Ethylhexan-1-ol	LC50/96 h (Golden orfe): 17.1 mg/L
		EC50/48 h ( <i>Daphnia magna</i> ): 39 mg/L
		EC50/72 h (Scenedesmus subspicatus): 16.6 mg/L
	Reaction products of paraformaldehyde and 2-	LC50 ( <i>Brachidanio rerio</i> ): 57.7 mg/l
	hydroxypropylamine (ratio 3:2); [MBO]	EC50 ( <i>Daphnia magna</i> ): 37.9 mg/l
		EC50 (Desmodesmus subspicatus): 5.7 mg/l

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

Distillates (petroleum), hydrotreated heavy paraffinic

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, 2-methyloxirane and oxirane

EC50 (microorganisms): 44 mg/L LL50/96 h (*Pimephales promelas*): >100 mg/L EL50/48 h (*Daphnia magna*): >10000 mg/L NOEL/72 h (*Pseudokirchneriella subcapitata*): ≥100 mg/L LC50/96 h (*Danio rerio*): 10 to 100 mg/l

#### 12.2 Persistence and degradability

No data available on the mixture. The following data are for the products components:

2-ethylhexyl nitrate	Not inherently biodegradable, 0% degradation after 28
	days.
Hydrocarbons, C10-C13, n-alkanes,	Readily biodegradable
isoalkanes, cyclics, < 2% aromatics	
Hydrocarbons, C10 aromatics, >1% naphthalene	Inherently biodegradable.
Hydrocarbons, C10 aromatics, <1% naphthalene	Inherently biodegradable.
2-Ethylhexan-1-ol	Readily biodegradable
reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]	Readily biodegradable.
Distillates (petroleum), hydrotreated heavy paraffinic	Inherently biodegradable.

#### 12.3 Bioaccumulative potential

Components in this product are not expected to bioaccumulate.

The following data are for the products components:

	Partition coefficient	BCF
2-ethylhexyl nitrate	Log Kow 5.24 (40°C)	1 332 L/kg
2-Ethylhexan-1-ol	Log Kow 2.9	38.06 L/kg
Reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2); [MBO]	Log Pow: -0.3	No data available

12.4 Mobility in soil

The product is very slightly soluble in water. Insoluble hydrocarbon components will float on water. Volatile components of the product will distribute to air.

- **12.5** Results of PBT and vPvB assessment The product does not contain substances assessed to be PBT or vPvB.
- 12.6 Other adverse effects
- No known significant effects or critical hazards.

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

### **SECTION 13: Disposal Considerations**

#### 13.1 Waste treatment methods

Product and packaging to be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation. Do not landfill.

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.

### **SECTION 14: Transport Information**

#### ADR

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10 aromatics)
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. (2-ethylhexyl nitrate, Hydrocarbons, C10 aromatics)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
RID		
14.1	UN Number	3082

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

14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10 aromatics)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
IATA/I	САО	
14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10 aromatics)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
IMDG		
14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, Hydrocarbons, C10 aromatics)
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
		Tunnel Restriction Code: (-)
		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.

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

### **SECTION 15: Regulatory Information**

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

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).

Regulation (EU) No 528/2012 (BPR): Reaction products of paraformaldehyde and 2- hydroxypropylamine (ratio 3:2); [MBO]: Approval Status: Under review.

Authorisations and/or restrictions on use:

REACH Annex XVII – Restrictions: Entry 28. Restricted to professional users.

This restriction does not apply to the following fuels and oil products:

- motor fuels which are covered by Directive 98/70/EC,
- mineral oil products intended for use as fuel in mobile or fixed combustion plants,
- fuels sold in closed systems (e.g. liquid gas bottles);

#### 15.2 Chemical Safety Assessment

Not applicable.

### **SECTION 16: Other Information**

#### i) Indication of changes:

Version:	2.0			
Issue date	15/07/2019			
Previous V	1.0			
Issue date	08/04/2016			
Sections changed from previous ALL version:				
Abbreviati	ons and acronyms:			
ATE	Acute Toxicity Estimate			
BCF	<b>Bioconcentration Factor</b>			
bw	Body weight			
CAS	Chemical Abstracts Service			
CNS	Central Nervous System			

ii)

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

dw	Dry Weight
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	Effective Concentration 50 %
EL50	Effective Loading rate 50%
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
LL50	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. ECHA REACH dossiers Regulation (EC) No. 1272/2008. Regulation (EC) No. 1907/2006 Regulation (EU) No. 2015/830 HSE EH40 GESTIS ILV

## 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; H312	Calculation
Acute Tox. 4; H332	Calculation
Skin Irrit. 2; H315	Calculation
Eye Dam. 1; H318	Calculation
Skin Sen. 1; H317	Calculation
Muta. 2; H341	Calculation
Carc. 1B; H350	Calculation
Asp. Tox. 1; H304	Calculation
Aquatic Chronic 2; H411	Calculation

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

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

Flam. Liq. 3: H226	Flammable liquids, Category 3: Flammable liquid and vapour.
Acute Tox. 4: H302	Acute Toxicity, oral, category 4: Harmful if swallowed.
Asp. Tox. 1: H304	Aspiration hazard, category 1: May be fatal if swallowed and enters airways.
Acute Tox. 3: H311	Acute Toxicity, dermal, category 3: Toxic in contact with skin.
Acute Tox. 4:H312	Acute Toxicity, dermal, category 4: Harmful in contact with skin
Skin Corr. 1B: H314	Skin corrosion/irritation, category 1B: Causes severe skin burns and eye damage.
Skin Irrit. 2: H315	Skin corrosion/irritation, category 2: Causes skin irritation.
Skin Sens. 1: H317	Skin sensitisation, category 1: May cause an allergic skin reaction.
Eye Dam. 1: H318	Serious eye damage/eye irritation, category 1: Causes serious eye damage.
Eye Irrit. 2: H319	Serious eye damage/eye irritation, category 2: Causes serious eye irritation.
Acute Tox. 4: H332	Acute Toxicity, inhalation, category 4: Harmful if inhaled.
STOT SE 3: H335	Specific target organ toxicity — single exposure, Category 3 Respiratory tract irritation: May cause respiratory irritation.
STOT SE 3: H336	Specific target organ toxicity — single exposure, Category 3 Narcosis: May cause drowsiness or dizziness.
Muta. 2: H341	Germ Cell Mutagenicity, category 2: Suspected of causing genetic defects.
Carc. 1B: H350	Carcinogenicity, category 1B: May cause cancer.
Carc. 2: H351	Carcinogenicity, category 2: Suspected of causing cancer.
STOT RE 2: H373	Specific Target Organ Toxicity, repeated exposure, category 2: May cause damage to organs (Respiratory Tract, Gastrointestinal tract) through prolonged or repeated exposure.
Aquatic Acute 1: H400	Hazardous to the Aquatic Environment, Category Acute 1: Very toxic to aquatic life
Aquatic Chronic 1: H410	Hazardous to the Aquatic Environment, Category Chronic 1: Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: H411	Hazardous to the Aquatic Environment, Category Chronic 2: Toxic to aquatic life with long lasting effects.

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

EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

#### vi) Training Advice

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

#### 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.