XO1338M Marine Fuel Conditioner

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

1.1 Product identifier

Product name:	XO1338M Marine Fuel Conditioner (new formulation)
Trade name(s):	Marine Fuel Conditioner (XO1338M)
Product description:	Liquid fuel additive for marine fuel.
CAS No.:	Not applicable.
EC No.:	Not applicable.
Index No.:	Not applicable.

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

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

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 1743 761415
E-mail:	info@fastexocet.co.uk

1.4 Emergency telephone number

In case of emergency, call:	0844 560 5135 (24 hours, 7 days)

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
Asp. Tox. 1; H304
Acute Tox. 4; H312
Skin Corr 1A; H314
Acute Tox. 4; H332
Carc. 2; H351
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

2.1.2. Classification according to Directive 67/548/EEC & Directive 1999/45/EC

Harmful; Xn; R20/21/22
Irritant; Xi; R38
Irritant; Xi; R41
Carc. Cat. 3; R40
Harmful; Xn; R65
Dangerous for the environment; N; R50/53

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: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled.

H351: Suspected of causing cancer.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

P280: Wear protective gloves / protective clothing / eye protection / face protection.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 or doctor/physician.
P405: Store locked up.
P501: Dispose of contents/container to: disposal should be in accordance with local, state or national legislation.

Supplemental Hazard information (EU): None.

2.2.2. Label according to Directive 67/548/EEC or Directive 1999/45/EC

Hazard symbol(s):

Indication(s) of danger: Harmful; Dangerous for the Environment.

Risk phrase(s):

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R40: Limited evidence of a carcinogenic effect.
R65: Harmful: may cause lung damage if swallowed.
R50/53: Very toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

Safety Phrase(s):

S1/2: Keep locked up and out of the reach of children.
S13: Keep away from food, drink and animal feeding stuffs.
S23: Do not breathe fumes/vapour.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29: Do not empty into drains.
S35: This material and its container must be disposed of in a safe way.
S36: Wear suitable protective clothing.
S39: Wear eye/face protection.
S51: Use only in well-ventilated areas.
S61: Avoid release to the environment. Refer to special instructions/Safety Data Sheets.
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

2.3 Other hazards

None known.

SECTION 3: Composition

3.2 Mixtures

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

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
2-Ethylhexyl nitrate	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
2,6-Di-tert-butylphenol	30-50	128-39-2	204-884-0	-	Eye Dam 1; H318 Aquatic Acute 1: H400 Aquatic Chronic 1; H410

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
3,3'-Methylenebis[5-methyloxazolidine]	5-10	66204-44-2	266-235-8	-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1A; H314 Aquatic Chronic 3; H412
Fuels, diesel	1-5	68334-30-5	269-822-7	649-224-00-6	Asp. Tox. 1; H304 Carc. 2; H351
Solvent naphtha (petroleum), heavy arom.	1-5	64742-94-5	265-198-5	649-424-00-3	Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411
Sulfonic acids, petroleum, sodium salts	< 1	68608-26-4	271-781-5	-	Eye Dam. 1; H318
1,2,4-Trimethylbenzene	< 1	95-63-6	202-436-9	601-043-00-3	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 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

Classification according to Directive 67/548/EEC

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
2-Ethylhexyl nitrate	50-60	27247-96-7	248-363-6	-	Xn; R20/21/22 R44 R66 N; R51/53
2,6-Di-tert-butylphenol	30-50	128-39-2	204-884-0	-	Xi; R41 N; R50/53
3,3'-Methylenebis[5-methyloxazolidine]	5-10	66204-44-2	266-235-8	-	Xn; R21/22 C; R34 N; R52
Fuels, diesel	1-5	68334-30-5	269-822-7	649-224-00-6	Carc. Cat. 3; R40 Xn; R65
Solvent naphtha (petroleum), heavy arom.	1-5	64742-94-5	265-198-5	649-424-00-3	Xi; R36/38 Xn; R65 N; R51/53
Sulfonic acids, petroleum, sodium salts	< 1	68608-26-4	271-781-5	-	Xi; R41

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
1,2,4-Trimethylbenzene	< 1	95-63-6	202-436-9	601-043-00-3	R10 Xn; R20 Xi; R36/38/37 N; R51/53
Naphthalene	< 1	91-20-3	202-049-5	601-052-00-2	Xn; R22 Carc. Cat. 3; R40 N; R50/53

See Section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

INHALATION: Obtain immediate medical attention. Remove patient form exposure, keep warm and at rest.

SKIN CONTACT: Obtain immediate medical attention. Remove contaminated clothing immediately. Rinse affected area with copious amounts of water. Then wash area with soap and water for at least 30 minutes. Discard of or wash thoroughly contaminated clothing.

EYE CONTACT: Obtain immediate medical attention. Remove contact lenses if present and easy to do. Wash eyes immediately with plenty of water for at least 30 minutes.

INGESTION: Obtain immediate medical attention. Provided the patient is conscious wash mouth out with water and provide patient with 200-300 ml of water to drink. Do not induce vomiting.

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

Skin contact causes burns, blistering, redness and pain. Eye contact causes burns, watering, redness and pain. Inhalation causes irritation to the respiratory tract. Ingestion can cause burns to mouth, throat and digestive tract. If swallowed, aspiration into lungs may result in chemical pneumonia.

Suspected of causing cancer.

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

In case of accident or if you feel 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.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media:	Foam, CO2 or dry powder. For large fires, use water.
Unsuitable extinguishing media:	Do not use water jet.

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.

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

5.3 Advice for fire-fighters

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep fire exposed containers cool by spraying with water. Do not allow to enter drains, sewers or watercourses.

Flash point: Approx. 80°C (closed cup).

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. Do not breathe fumes/vapours. Do not get in contact with skin or eyes. 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. Wear suitable protective clothing (See Section 8). Contaminated clothing should be thoroughly cleaned.

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 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 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Provide adequate ventilation, including local extraction to ensure occupational exposure limits are not exceeded. Do not breathe fumes/vapours. Do not get in contact with skin or eyes. Wear suitable personal protective equipment (See Section 8).

Do not eat, drink or smoke when using this product. Wash exposed skin after use. 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 from direct sunlight. Store locked up. Store only in the original container. Store in a cool, well ventilated place. Maximum handling temperature: 50°C. Empty containers retain product residue and can be hazardous.

Keep away from oxidising agents.

7.3 Specific end uses(s)

Liquid fuel additive for marine fuel.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Workplace exposure limits

Source: EH40/2005, 2nd Ed., 2011.

Substance	CAS No.	LTEL (8 hr TWA)		STEL (15 min)		Comments
		ppm	mg/m³	ppm	mg/m³	
Trimethylbenzenes, all isomers or mixtures	25551-13-7	25	125	-	-	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Provide adequate ventilation, including local extraction to ensure occupational exposure limits are not exceeded.

8.2.2 Personal protection

Eye protection: Goggles giving complete protection to eyes. (EN 166)

Skin protection:

Hand protection: Chemical resistant gloves. (EN 374).

Other: Long sleeve protective clothing. Plastic apron. Rubber boots.

Respiratory protection: In the case of insufficient ventilation, wear suitable respiratory equipment. (BS EN 14387:2004+A1)

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

8.2.3 Environmental exposure controls

Inform environmental manager of all incidents involving this product.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Yellowish liquid.
Odour:	Sweet.
Odour threshold:	Not available.
pH:	Not available.
Melting/freezing point::	-50°C
Initial boiling point and boiling range:	Not available.
Flash point:	Approx. 80°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:	Not available.
Relative density:	0.93 - 1 (Water = 1)
Solubility(ies):	Immiscible in water. Miscible in aromatic solvents.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	< 10 cSt (40°C) (Kinematic)
Explosive properties:	Not explosive. Vapour may form explosive mixture in air.
Oxidising properties:	Not oxidising.

9.2 Other information

None.

SECTION 10: Stability and Reactivity

10.1 Reactivity	Reacts with oxidising agents.
10.2 Chemical stability	Stable under normal conditions.

10.3	**Possibility of hazardous reactions**	No hazardous reactions expected during normal use.
10.4	**Conditions to avoid**	Keep away from sources of ignition, hot surfaces and direct sunlight. Contact with incompatible materials.
10.5	**Incompatible materials**	Oxidising agents.
10.6	**Hazardous decomposition products**	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, various hydrocarbons.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. No data available on the mixture.
Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/irritation	Causes serious eye damage.
Skin sensitisation	No evidence of skin sensitisation.
Respiratory sensitisation	No evidence of respiratory sensitisation.
Germ cell mutagenicity	No evidence of mutagenicity.
Carcinogenicity	Suspected of causing cancer.
Reproductive toxicity	No evidence of reproductive toxicity.
Specific Target Organ Toxicity – single exposure	Causes irritation to the respiratory system.
Specific Target Organ Toxicity – repeated exposure	Based on the available data, the classification criteria are not met.
Aspiration hazard	May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.

Information on likely routes of exposure

Inhalation	Harmful if inhaled. Inhalation causes irritation of the respiratory tract.

Skin contact	Harmful in contact with skin. Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Harmful if swallowed. Ingestion can cause burns to mouth, throat and digestive tract. May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Skin contact causes burns, blistering, redness and pain. Eye contact causes burns, watering, redness and pain. Inhalation causes irritation to the respiratory tract. Ingestion can cause burns to mouth, throat and digestive tract. If swallowed, aspiration into lungs may result in chemical pneumonia.
Mixture versus substance information	No data available.
Other information	None.

SECTION 12: Ecological Information

12.1	**Toxicity**	Very toxic to aquatic life with long lasting effects. M factor: 1
12.2	**Persistence and degradability**	No data available.
12.3	**Bioaccumulative potential**	No data available.
12.4	**Mobility in soil**	No data available.
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**	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.

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**	2735
14.2	**UN Proper shipping name**	AMINES, LIQUID, CORROSIVE, N.O.S. (contains 3,3'-Methylenebis[5-methyloxazolidine])
14.3	**Transport hazard class(es)**	8
14.4	**Packing group**	I
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

ADN

14.1	**UN Number**	2735
14.2	**UN Proper shipping name**	AMINES, LIQUID, CORROSIVE, N.O.S. (contains 3,3'-Methylenebis[5-methyloxazolidine])
14.3	**Transport hazard class(es)**	8
14.4	**Packing group**	I
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

RID

14.1	**UN Number**	2735
14.2	**UN Proper shipping name**	AMINES, LIQUID, CORROSIVE, N.O.S. (contains 3,3'-Methylenebis[5-methyloxazolidine])
14.3	**Transport hazard class(es)**	8
14.4	**Packing group**	I
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

IATA/ICAO

14.1	**UN Number**	2735
14.2	**UN Proper shipping name**	AMINES, LIQUID, CORROSIVE, N.O.S. (contains 3,3'-Methylenebis[5-methyloxazolidine])

14.3	**Transport hazard class(es)**	8
14.4	**Packing group**	I
14.5	**Environmental hazards**	Yes
14.6	**Special precautions for the user**	Read SDS and supplier instructions on correct use of the product.

IMDG

14.1	**UN Number**	2735
14.2	**UN Proper shipping name**	AMINES, LIQUID, CORROSIVE, N.O.S. (contains 3,3'-Methylenebis[5-methyloxazolidine])
14.3	**Transport hazard class(es)**	8
14.4	**Packing group**	I
14.5	**Environmental hazards**	Marine pollutant.
14.6	**Special precautions for the user**	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**	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), Directive 67/548/EEC & Directive 1999/45/EC.
15.2	**Chemical Safety Assessment**	Not applicable.

SECTION 16: Other Information

Full text of relevant R-phrases and/or H-statements:

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.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.

	H332: Harmful if inhaled. H335: May cause respiratory irritation. 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. H412: Harmful to aquatic life with long lasting effects.
Supplemental Hazard information (EU):	EUH044: Risk of explosion if heated under confinement. EUH066: Repeated exposure may cause skin dryness or cracking.
Risk phrase(s):	R10: Flammable. R20: Harmful by inhalation. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R21/22: Harmful in contact with skin and if swallowed. R22: Harmful if swallowed. R34: Causes burns. R36/37/38: Irritating to eyes, respiratory system and skin. R36/38: Irritating to eyes and skin. R38: Irritating to skin. R40: Limited evidence of a carcinogenic effect. R44: Risk of explosion if heated under confinement. R41: Risk of serious damage to eyes. R65: Harmful: may cause lung damage if swallowed. R66: Repeated exposure may cause skin dryness or cracking. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52: Harmful to aquatic organisms.

Abbreviations:

CAS:	Chemical Abstracts Service;
EINECS:	European Inventory of Existing Commercial Chemical Substances
PBT:	Persistent, Bioaccumulative and Toxic.
vPvB:	Very Persistent and Very Bioaccumulative.

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Tel: 01543 465 744 | Email: lubricants@aidfueloilsgroup.co.uk | Web: www.aidfueloilsgroup.co.uk

References:

Supplier's Safety Data Sheets for ingredients
Product formulation
Approved Classification and Labelling Guide (Sixth edition)
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Regulation (EC) No. 1272/2008 of the European Parliament and of the council.
EH40/2005, 2nd Ed., 2011.

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.

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