

Product Safety Sheet

According to Regulation (EC) No. 1907/2006 (REACH)

XO1948XB Anti Bug Protect

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

1.1 Product identifier

| | |
|----------------------|-----------------------------|
| Product name: | XO1948XB Anti Bug Protect |
| Trade name(s): | Anti Bug Protect (XO1948XB) |
| Product description: | Liquid fuel additive |
| 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
Acute Tox. 4; H312
Skin Corr. 1B; H314

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

Harmful; Xn; R21/22
Corrosive; C; R34
R52

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.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.

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:

Corrosive, Harmful.

Risk phrase(s):

R21/22: Harmful in contact with skin and if swallowed.
R34: Causes burns.
R52: Harmful to aquatic organisms.

Safety Phrase(s):

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 |
|--|--------|------------|-----------|-----------|---|
| 3,3'-methylenebis[5-methyloxazolidine] | 90-100 | 66402-44-2 | 266-235-8 | - | Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 |

Classification according to Directive 67/548/EEC

| Chemical name | % w/w | CAS No. | EC No. | Index No. | Classification |
|--|--------|------------|-----------|-----------|-----------------------------|
| 3,3'-methylenebis[5-methyloxazolidine] | 90-100 | 66402-44-2 | 266-235-8 | - | Xn; R21/22 C; R34 R52 |

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 from 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 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 may cause irritation to the respiratory tract. Ingestion can cause burns to mouth, throat and digestive tract.

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 breathing is laboured, oxygen should be administered by qualified personnel.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Water, 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

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

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: > 100°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. The vapour is heavier than air; it will concentrate in low lying areas, beware of pits and confined spaces. Do not breathe

fumes/vapour. Do not get in contact with skin or eyes. Use intrinsically sound equipment. Wear suitable personal protective equipment (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 adsorbent 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

Provide adequate ventilation, including local extraction to ensure the occupational exposure limit is not exceeded. Do not breathe fumes/vapour. Do not get in contact with skin or eyes. Wear suitable personal protective equipment (See Section 8).

Do not eat, drink or smoke in the vicinity of the 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 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.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

No occupational exposure limits available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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

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

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| Appearance: | Colourless to light yellow liquid. |
| Odour: | Amine. |
| Odour threshold: | Not available. |
| pH: | Not applicable. |
| Melting/freezing point:: | < -35°C |
| Initial boiling point and boiling range: | Not available. |
| Flash point: | > 100°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 (Air = 1): | Approx. 4.6. |
| Relative density (Water = 1): | 1.049 - 1.069 @ 20°C |
| 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 (Kinematic): | < 10 cSt (40°C). |
| Explosive properties: | Not explosive. |
| Oxidising properties: | Not oxidising. |

9.2 Other information

None.

SECTION 10: Stability and Reactivity

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|--------------------------------|---------------------------------|
| 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, 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, nitrogen oxides and formaldehyde. |

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

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| Acute toxicity | Harmful if swallowed. Harmful in contact with skin. LD50 (oral, rat): 900 mg/kg. LD50 (dermal, rat): 1207-1620 mg/kg. LC50 (inhalation): No data available. |
| 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 | No evidence of reproductive toxicity. |
| Reproductive toxicity | No evidence of carcinogenicity. |
| Specific Target Organ Toxicity – single exposure | May cause irritation to the respiratory system. |
| Specific Target Organ Toxicity – repeated exposure | Based on the available data, the classification criteria are not met. NOEL (oral): 72mg/kg (90 days) |
| Aspiration hazard | Not classified. |

Information on likely routes of exposure

| | |
|-------------------|---|
| Inhalation | Inhalation may cause irritation of the respiratory tract. |
|-------------------|---|

| | |
|---------------------|---|
| Skin contact | Harmful in contact with skin. Causes severe skin burns. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Ingestion can cause burns to mouth, throat and digestive tract. |

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 may cause irritation to the respiratory tract. Ingestion can cause burns to mouth, throat and digestive tract.

Mixture versus substance information No data available.

Other information None.

SECTION 12: Ecological Information

| | |
|--|---|
| 12.1 Toxicity | Harmful to aquatic organisms. LC50 (Fish): 57.7 mg/l. EC50 (Algae): 5.7 mg/l, 72 h EC50 (Daphnia): 37.9 mg/l EC50 (Bacteria): 44 mg/l |
| 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 | Chemical oxygen demand: 17887 mg/g. |

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 | III |
| 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 | III |
| 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 | III |
| 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. (3,3'-Methylenebis[5-methyloxazolidine]) |

| | | |
|-------------|---|---|
| 14.3 | Transport hazard class(es) | 8 |
| 14.4 | Packing group | III |
| 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 | III |
| 14.5 | Environmental hazards | Yes |
| 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):

H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.

Supplemental Hazard information (EU): None.

Risk phrase(s): R21/22: Harmful in contact with skin and if swallowed.

R34: Causes burns.
R52/53: 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.

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.

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.

Version history:

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|--|----------------|
| Version: | 1.0 |
| Issue date: | 02/04/2013 |
| Previous Version: | none |
| Issue date of previous version: | Not applicable |
| Sections changed from previous version: | Not applicable |