



Safety Data Sheet

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

XO1966D Power Restorer Additive

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

1.1 Product identifier

Product name: XO1966D Power Restorer Additive
Trade name(s): Power Restorer Additive (XO1966D)
Product description: Liquid fuel additive for diesel or gas oil.
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 for diesel or gas oil.
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: 0333 333 9962 (24 hours, 7 days)



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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)

Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H336
Carc. 2; H351
Aquatic Chronic 2; H411

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

Irritant; Xi; R38
Carc. Cat. 3; R40
Harmful; Xn; R65
R67
Dangerous for the environment; N; R51/53

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):

H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer (inhalation).
H411: Toxic to aquatic life with long lasting effects.



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Precautionary Statement(s): P201: Obtain special instructions before use.
P271: Use only outdoors or in a well-ventilated area.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.
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): R38: Irritating to skin.
R40: Limited evidence of a carcinogenic effect.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s): S2: Keep out of the reach of children.
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.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S46: If swallowed, seek medical advice immediately and show this container or label.



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S51: Use only in well-ventilated areas.
S61: Avoid release to the environment. Refer to special instructions/safety data sheet.
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
Solvent naphtha (petroleum), heavy arom.	30 - 50	64742-94-5	265-198-5	649-424-00-3	Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411
Trimethylbenzene	5-15	25551-13-7	247-099-9	-	Flam Liq. 3; H226 Acute Tox 4; H302 Acute Tox 4; H312 Skin Irrit. 2; H315
Distillates (petroleum), hydrotreated light	5-15	64742-47-8	265-149-8	649-422-00-2	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411
2-Ethylhexan-1-ol	5-10	104-76-7	203-234-3	-	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335
Butanedioic acid, polyisobutenyl	5-10	68610-89-9	-	-	Eye Irrit. 2; H319
Naphthalene	2-5	91-20-3	202-049-5	601-052-00-2	Acute Tox 4; H302 Carc 2; H351 (inhalation) Aquatic Acute 1; H400 Aquatic Chronic 1; H410



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Classification according to Directive 67/548/EEC

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
Solvent naphtha (petroleum), heavy arom.	30 - 50	64742-94-5	265-198-5	649-424-00-3	Xi; R38 Xn; R65 R67 N; R51/53
Trimethylbenzene	5-15	25551-13-7	247-099-9	-	R10 Xn; R21/22 Xi; R38
Distillates (petroleum), hydrotreated light	5-15	64742-47-8	265-149-8	649-422-00-2	R10 Xi; R38 Xn; R65 R67 N; R51/53
2-Ethylhexan-1-ol	5-10	104-76-7	203-234-3	-	Xn; R20 Xi; R36/37/38
Butanedioic acid, polyisobutenyl	5-10	68610-89-9	-	-	Xi; R36
Naphthalene	2-5	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:

Remove patient from exposure, keep warm and at rest. If symptoms persist, obtain medical attention.

SKIN CONTACT:

Remove contaminated clothing immediately. Wash affected area with copious amounts of soap and water. If skin irritation persists, obtain medical attention. Contaminated clothing should be thoroughly cleaned before reuse.

EYE CONTACT:

Rinse cautiously with water for 10 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, obtain medical attention.

INGESTION:

Do not induce vomiting. Provided the patient is



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conscious, rinse mouth out with water and provide patient with 200-300 ml of water to drink. Never give anything to drink to an unconscious patient. Obtain immediate medical attention.

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

Skin contact causes redness and pain. Eye contact causes watering, redness and pain. Inhalation may cause drowsiness or dizziness. Ingestion may cause irritation to mouth, throat and digestive tract. If swallowed, aspiration into lungs may result in chemical pneumonia.

Suspected of causing cancer by inhalation.

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.

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: 67°C (closed cup).



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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. Avoid breathing vapours. Avoid contact with skin and 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 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation, including local extraction to ensure that occupational



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exposure limits are not exceeded. Avoid breathing vapours. Avoid contact with skin and eyes. Wear suitable personal protective equipment (See Section 8).

Do not eat, drink or smoke in the vicinity of the product. Wash thoroughly after handling. Contaminated clothing should be thoroughly cleaned before reuse. Avoid release to the environment.

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 locked up. Store in a cool, well ventilated place. Keep container tightly closed. 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 diesel or gas oil.

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/m ³	ppm	mg/m ³	
Trimethylbenzenes, all isomers or mixtures	25551-13-7	25	125	-	-	-

Community exposure limits

Source: 91/322/EEC, 2000/39/EC, 2006/15/EC

Substance	Exposure Limit Type	CAS No.	LTEL (8 hr TWA)		STEL (15 min)		Comments
			ppm	mg/m ³	ppm	mg/m ³	
Naphthalene	ILV	91-20-3	10	30	-	-	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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



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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:	Dark red liquid.
Odour:	Hydrocarbon.
Odour threshold:	Not available.
pH:	Not applicable.
Melting/freezing point:	Pour point: -54°C
Initial boiling point and boiling range:	Not available.
Flash point:	67°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:	0.89 (16°C) (Water = 1)
Solubility(ies):	Immiscible in water. Miscible in aromatic solvents.
Partition coefficient: n-octanol/water:	Not available.



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Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	2600 cSt (0°C) 225 cSt (40°C)
Explosive properties:	Not explosive. Vapour may form explosive mixture with 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. Risk of explosion if heated under confinement.
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, various hydrocarbons.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	May cause discomfort if swallowed. No data available on the mixture.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Skin sensitisation	No evidence of skin sensitisation.



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Respiratory sensitisation	No evidence of respiratory sensitisation.
Germ cell mutagenicity	No evidence of mutagenicity.
Carcinogenicity	Suspected of causing cancer by inhalation.
Reproductive toxicity	No evidence of reproductive toxicity.
Specific Target Organ Toxicity – single exposure	May cause drowsiness or dizziness.
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	May cause drowsiness or dizziness.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Ingestion may cause irritation 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 redness and pain. Eye contact causes watering, redness and pain. Inhalation may cause drowsiness or dizziness. Ingestion may cause irritation 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

Toxic to aquatic life with long lasting effects.

M factor: 1.



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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	3082
14.2 UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains naphthalene)
14.3 Transport hazard class(es)	9
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	3082
14.2 UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains naphthalene)
14.3 Transport hazard class(es)	9
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.



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RID		
14.1 UN Number		3082
14.2 UN Proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains naphthalene)
14.3 Transport hazard class(es)		9
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		3082
14.2 UN Proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains solvent naphtha (contains naphthalene)
14.3 Transport hazard class(es)		9
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		3082
14.2 UN Proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains naphthalene)
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		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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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.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer (inhalation).
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.

Supplemental Hazard information (EU): None.

Risk phrase(s):

R10: Flammable.
R20: Harmful by inhalation.
R21/22: Harmful in contact with skin and if swallowed.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R36/37/38: Irritating to eyes, respiratory system and skin.
R38: Irritating to skin.
R40: Limited evidence of a carcinogenic effect.
R65: Harmful: may cause lung damage if swallowed.



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R67: Vapours may cause drowsiness and dizziness.
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.

Abbreviations:

CAS: Chemical Abstracts Service;
EINECS: European Inventory of Existing Commercial Chemical Substances
ILV: Indicative Limit Value
LTEL: Long Term Exposure Limit
PBT: Persistent, Bioaccumulative and Toxic.
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
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.

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