SAFETY DATA SHEET
Engine Flush Treatment

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

1.1. Product identifier

Product name FX081504 Engine Flush Treatment

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

Identified uses Additive for motor oil.

1.3. Details of the supplier of the safety data sheet

Supplier

Quest Consumables Ltd
Seymour Road
Nuneaton
Warwickshire
CV11 4LB
T+44 (0) 2476 322126
F+44 (0) 2476 322117
sales@questconsumables.com

1.4. Emergency telephone number

Emergency telephone +44 (0)2476 322126

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R65. R66.

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements
P102 Keep out of reach of children.
P262 Do not get in eyes, on skin, or on clothing.
P308+P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental label information RCH002b For professional users only.

Contains Distillates (Petroleum) Hydrotreated Light

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2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Distillates (Petroleum) Hydrotreated Light		**60-100%**
CAS number: 64742-47-8	EC number: 265-149-8	REACH registration number: 01-2119484819-18

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Asp. Tox. 1 - H304	Xn;R65. R66.

2-BUTOXYETHANOL		**30-60%**
CAS number: 111-76-2	EC number: 203-905-0	REACH registration number: 01-2119475108-36

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xn;R20/21/22 Xi;R36/38

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Remove affected person from source of contamination. Provide rest, warmth and fresh air. General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Rinse nose, mouth and throat with water. If breathing stops, provide artificial respiration.

Ingestion Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Keep affected person warm and at rest.

Skin contact Take off immediately all contaminated clothing and wash it before reuse. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

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Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog. Dry chemicals, sand, dolomite etc. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards May ignite at high temperature.

Hazardous combustion products In case of fire, toxic gases (CO, CO2, NOx) may be formed.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Avoid breathing fire gases or vapours. Use water SPRAY only to cool containers! Do not put water on leaked material. Do not allow water to contact any leaked material. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Keep unnecessary and unprotected personnel away from the spillage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all sources of ignition. Do not breathe vapours. Keep unnecessary and unprotected personnel away from the spillage.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid spreading dust or contaminated materials.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. No smoking, sparks, flames or other sources of ignition near spillage. Keep away from flammable and combustible materials. First aid personnel should wear appropriate protective equipment during any rescue. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage. Control run-off water by containing and keeping it out of sewers and watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. S24a Avoid prolonged or repeated contact with skin Static electricity and formation of sparks must be prevented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep out of the reach of children.

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7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Distillates (Petroleum) Hydrotreated Light

Long-term exposure limit (8-hour TWA): WEL 800 mg/m³

2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm(Sk) 123 mg/m³
Short-term exposure limit (15-minute): WEL 50 ppm(Sk)
WEL = Workplace Exposure Limit

Ingredient comments SUP = Supplier's recommendation.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Personal protection When using do not smoke

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Gloves of nitrile rubber, PVA or Viton are recommended.

Other skin and body protection Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not smoke in work area. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Seek advice from supervisor on the company's respiratory protection standards.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Colourless.

Odour Hydrocarbons. Solvent.

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Initial boiling point and range	200 - 250°C @ 760 mm Hg
Flash point	> 75°C PMCC (Pensky-Martens closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.5% Upper flammable/explosive limit: 8.0%
Vapour pressure	<10 mbar @ 37.8°C
Vapour density	> 1
Relative density	0.80 @ 15°C
Solubility(ies)	Immiscible with water.
Partition coefficient	Not applicable.
Auto-ignition temperature	225°C
Viscosity	1.5 cSt @ 40°C

9.2. Other information

Other information	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat. Avoid contact with the following materials: Strong oxidising agents. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid	Keep away from oxidising materials, heat and flames.

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	2,933.33

Acute toxicity - dermal

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Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
ATE dermal (mg/kg)	3,533.33

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	36.67

Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test Ames test Negative.

Inhalation	Vapour may irritate respiratory system/lungs. Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Harmful: may cause lung damage if swallowed. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Product has a defatting effect on skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Prolonged or repeated exposure may cause severe irritation. Not a skin sensitiser.
Eye contact	May cause severe eye irritation.
Medical considerations	The following pre-existing or historic medical conditions of the worker may lead to an increased risk of adverse health effects following exposure to this product: Skin disorders and allergies.

SECTION 12: Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >1000 mg/l, Scenedesmus subspicatus, Fish

12.2. Persistence and degradability

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 69%: 28 days

12.3. Bioaccumulative potential

Partition coefficient	Not applicable.

12.4. Mobility in soil

Mobility	Floats on water. Contamination will evaporate from the surface of water and soils.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

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Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Empty containers may contain residual flammable vapours and product residue. Keep away from sparks, heat and sources of ignition. Labels should not be removed.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.

Guidance Workplace Exposure Limits EH40.
CHIP for everyone HSG228.
Safety Data Sheets for Substances and Preparations.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Revision comments	Supplemental information added.
Revision date	03/05/2017
Revision	2
SDS number	20889
SDS status	Approved.
Risk phrases in full	R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking.
Hazard statements in full	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.