

PatFluid®

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DATE: 26 MARCH 2019

REV. LEVEL: 8

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1. 1. Product identifier

Product Name PatFluid®

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

Identified uses Fuel additive.

1.3. Details of the supplier of the safety data sheet

Supplier CDTi

Bourne House,

475 Godstone Road,

Whyteleafe, Surrey,

CR3 OBL

United Kingdom

Tel: +44 (0) 1883 621 048

Contact Person safety@cdti.com

1.4. Emergency telephone number

National emergency telephone https://

https://poisoncentres.echa.europa.eu/

number

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 Repr. 2 - H361d Asp. Tox. 1 -

H304

Environmental hazards Not Classified

2. 2. Label elements



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Hazard Pictograms



Signal word Danger

Hazard statements H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child. H304 May be fatal if swallowed and enters airways.

Precautionary statements P102 Keep out of reach of children.

P101 If medical advice is needed, have product container or label at

hand.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/

doctor.

P331 Do NOT induce vomiting.

P501 Dispose of contents/ container in accordance with local

regulations.

Supplemental label

information

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains Odourless Kerosene, 2-Ethylhexanoic Acid, Hydrocarbons, C9-C11,

n-alkanes, isoalkanes, cyclics, <2% aromatics

Supplementary precautionary

statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

P264 Wash contaminated skin thoroughly after handling.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P321 Specific treatment (see medical advice on this label).

P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before

reuse.

P405 Store locked up.



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2.3. Other hazards

The product does not contain any substance that is classified as PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Odourless Kerosene 60-100%

Classification

Asp. Tox. 1 - H304

Cerium (III) Ethyl Hexanoate 10-30%

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

STOT SE 3 - H335

2-Ethylhexanoic Acid

CAS number: 149-57-5 EC number: 205-743-6 REACH registration number: 01-

2119488942-23-XXXX

5-10%

Classification

Repr. 2 - H361d

Hydrocarbons, C9-C11, n-

alkanes, isoalkanes, cyclics, <2%

Aromatics

CAS number: — EC number: 919-857-5

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304

2- 1-5%

Methoxymethylethoxypropanol



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Classification

Not Classified

1,2,4-TRIMETHYLBENZENE < 0.1%

CAS number: 95-63-6 EC number: 202-436-9

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335

Aquatic Chronic 2 - H411

PHOSPHORIC ACID ...%

Classification

Skin Corr. 1B - H314 Eye Dam. 1 - H318

NAPHTHALENE < 0.01%

CAS number: 91-20-3 EC number: 202-049-5 M factor (Acute) = 1 M factor (Chronic) = 1

Classification

Acute Tox. 4 - H302 Carc. 2 - H351

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

CUMENE < 0.01%

CAS number: 98-82-8 C number: 202-704-5

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

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SECTION 4: FIRST AID MEASURES



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4.1. Description of first aid measures

General information Get medical attention if any discomfort continues.

Inhalation 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.

Ingestion If medical attention is not immediately available, Rinse mouth

thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical

attention if any discomfort continues.

Skin contact Remove contaminated clothing immediately and wash skin with

soap and water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses

and open eyelids wide apart. 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. Get medical attention

promptly if symptoms occur after washing.

Inhalation Vapours may cause drowsiness and dizziness.

Ingestion Nausea, vomiting. Entry into the lungs following ingestion or

vomiting may cause chemical pneumonitis.

Skin contactProlonged contact may cause redness, irritation and dry skin. **Eye contact**Irritating to eyes. Symptoms following overexposure may include

the following: Redness. Pain.

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

Notes for the doctor No specific recommendations. Treat symptomatically.

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry

powder. Do not use water, if avoidable.

Unsuitable extinguishing media Water.

5.2. Special hazards arising from the substance or mixture



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Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may

liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

No specific firefighting precautions known.

firefighting

Special protective equipment for Use protective equipment appropriate for surrounding materials.

firefighting

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Small Spillages: Absorb spillage with sand or other inert absorbent.

For waste disposal, see Section 13.

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Keep separate from food, feedstuffs, fertilisers and other sensitive **Storage precautions**

material. Store in closed original container at temperatures

between 0°C and 40°C.

Storage class Chemical storage.

7.3. Specific end use(s)



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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

2-Methoxymethylethoxypropanol

Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m³

Sk

1,2,4-TRIMETHYLBENZENE

Long-term exposure limit (8-hour TWA): 25 ppm 125

PHOSPHORIC ACID ...%

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³ Short-term exposure limit (15-minute): WEL 2 mg/m³

NAPHTHALENE

Long-term exposure limit (8-hour TWA): WEL 10 ppm 53 mg/m³ Short-term exposure limit (15-minute): WEL 15 ppm 80 mg/m³

CUMENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm(Sk) 125 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 50 ppm(Sk) 250 mg/m3(Sk)

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Eye/face protection Eyewear complying with an approved standard should be worn if a

risk assessment indicates eye contact is possible. Unless the

assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection Chemical-resistant, impervious gloves complying with an approved

standard should be worn if a risk assessment indicates skin contact

is possible.

Hygiene measures Wash contaminated clothing before reuse. Wash hands after

handling.



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Respiratory protection No specific recommendations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

AppearanceLiquid.ColourAmber.

Odour Almost odourless.

pH Scientifically unjustified.

Melting Point Not determined.

Initial boiling point and range 192 - 256°C @ 760 mm Hg

Flash point 78 - 79°C Closed cup. **Evaporation rate** Not determined.

Upper/lower flammability or Lower flammable/explosive limit: 0.6 Upper flammable/explosive

explosive limitslimit: 7.0Vapour pressure350 Pa @ 20°CVapour density> 1 (Air = 1)

Relative density 0.84 - 0.88 @ 15°C Solubility(ies) Immiscible with water.

Auto-ignition temperature 225°C

Viscosity Kinematic viscosity $\leq 20.5 \text{ mm}^2/\text{s}$. 5 - 9 m²/s @ 40°C

Explosive properties Scientifically unjustified.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 83.7 %.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as

recommended. Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions



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Possibility of hazardous

reactions

Not relevant. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat. Avoid contact with the following materials: Strong

oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition Oxides of carbon. Thermal decomposition or combustion may

products liberate carbon oxides and other toxic gases or vapours.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological effectsNo information available.

Acute toxicity - oral

ATE oral (mg/kg) 4,761.9

Acute toxicity – dermal

ATE dermal (mg/kg) 10,476.19

Acute toxicity – inhalation

ATE inhalation (vapours mg/l) 104.76

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritationCauses eye irritation.

Respiratory sensitisation

Respiratory sensitisationBased on available data the classification criteria are

not met.

Skin sensitisation

Skin sensitisationBased on available data the classification criteria are

not met.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are

not met.

Genotoxicity - in vivoBased on available data the classification criteria are



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not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are

not met.

Reproductive toxicity

Reproductive toxicity – fertility Possible risk of adverse reproductive effects.

Specific target organ toxicity - single exposure

STOT - single exposureBased on available data the classification criteria are

not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity Low acute toxicity to aquatic organisms.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in Soil

Mobility The product is insoluble in water and will spread on the water

surface.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvBThis product does not contain any substances classified as PBT or

assessment vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS



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13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with

the requirements of the local Waste Disposal Authority.

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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 73/78 and the IBC Code

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

SECTION 15: REGULATORY INFORMATION

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

National regulations EH40/2005 Workplace exposure limits.



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Regulation (EC) No 1272/2008 of the European Parliament and of **EU** legislation

the Council of 16 December 2008 on classification, labelling and

packaging of substances and mixtures (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as

amended).

Authorisations (Title VII

Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation No specific restrictions on use are known for this product.

1907/2006)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision date 26 MARCH 2019

Revision 8

Supersedes date 17 MAY 2018

Hazard statements in full 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. H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the



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company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself/herself as to the suitability of such information for his/her own particular use.