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

1.1. Product identifier

Product name: Pump House Dual Purpose Coil Cleaner

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

Identified uses: Evaporator and condenser cleaner

1.3. Details of the supplier of the safety data sheet

Pump House Pumps Ltd, Glaisdale Drive East, Nottingham, NG8 4LY, United Kingdom T+44 (0) 115 500 5858, F+44 (0) 115 929 4468, info@pumphousepumps.com

1.4. Emergency telephone number

+44 (0)115 500 5858

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

- Physical and Chemical Hazards: Flam. Aerosol 1 H222
- Human health: Not classified.
- Environment: Not classified.

Classification (1999/45/EEC): F+;R12.

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

Human health: Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environment: This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physical and Chemical Hazards: Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word: Danger Hazard Statements

- H222 Extremely flammable aerosol.
- · H229 Pressurised container: May burst if heated

Precautionary Statements

- P102 Keep out of reach of children.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P271 Use only outdoors or in a well-ventilated area.
- P260 Do not breathe vapour/spray.
- P501 Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary Statements

P410+412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1-METHOXY-2-PROPANOL 5-10%

CAS-No.: 107-98-2 EC No.: 203-539-1

Classification (67/548/EEC) - R10, R67

Classification (EC 1272/2008)

Flam. Liq. 3 - H226

STOT SE 3 - H336

Registration Number: 01-2119457435-35

2-AMINOETHANOL< 1

CAS-No.: 141-43-5 EC No.: 205-483-3

Classification (67/548/EEC) - C;R34, Xn;R20/21/22

Classification (EC 1272/2008)

Acute Tox. 4 - H302

Acute Tox. 4 - H312

Acute Tox. 4 - H332

Skin Corr. 1B - H314

STOT SE 3 - H335

3-BUTOXYPROPAN-2-OL 5-10%

CAS-No.: 5131-66-8 EC No.: 225-878-4

Classification (67/548/EEC) - Xi;R36/38

Classification (EC 1272/2008)

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Registration Number: 01-2119475527-28

Alkoxypolyethoxypolypropoxypropanol 1-5%

CAS-No.: 68603-25-8

EC No.:

Classification (67/548/EEC) - Xn;R22., Xi;R36.

Classification (EC 1272/2008)

Not classified.

BUTANE 5-10%

CAS-No.: 106-97-8 EC No.: 203-448-7

Classification (67/548/EEC) - F+;R12

Classification (EC 1272/2008) - Flam. Gas 1 - H220 Registration Number: Exempt under REACH

ISOBUTANE 1-5%

CAS-No.: 75-28-5 EC No.: 200-857-2

Classification (67/548/EEC) - F+;R12

Classification (EC 1272/2008) - Flam. Gas 1 - H220 Registration Number: Exempt under REACH

PROPANE 1-5%

CAS-No.: 74-98-6 EC No.: 200-827-9

Classification (67/548/EEC) - F+;R12

Classification (EC 1272/2008) - Flam. Gas 1 - H220

Registration Number: Exempt under REACH

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: Move the exposed person to fresh air at once.

Inhalation: In case of inhalation of spray mist: Move person into fresh air and keep at rest. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion: Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention.

Skin contact: Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards: Extremely flammable. Forms explosive mixtures with air. May travel considerable distance to source of ignition and flash back. Aerosol cans may explode in a fire.

Specific hazards: Aerosol containers can explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Special Fire Fighting Procedures: Water spray should be used to cool containers. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Avoid inhalation of vapours and aerosol spray.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Let evaporate. Keep out of confined spaces because of explosion risk.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray near a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Extremely flammable. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA – 8 Hrs		STEL – 15 Min		Notes
1-METHOXY-2-PROPANOL	WEL	100 ppm(Sk)	375 mg/m3(Sk)	150 ppm(Sk)	560 mg/m3(Sk)	
2-AMINOETHANOL		1	2.5 mg/m3(Sk)	3	7.6 mg/m3(Sk)	
3-BUTOXYPROPAN-2-OL		No std.				
BUTANE	WEL	600 ppm		750 ppm		
ISOBUTANE	WEL	800 ppm		No std.		
PROPANE	SUP	ppm		ppm		

WEL = Workplace Exposure Limit.

Ingredient Comments: WEL = Workplace Exposure Limits

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment: In case of inadequate ventilation use suitable respirator.

Hand protection: Due to the packaging form, aerosol, risk of skin contact is small. For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures: Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Personal protection: When using do not smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Aerosol. Odour: Organic solvents. Flash point (°C): <-40 °C

Auto Ignition Temperature (°C): 410-580 Flammability Limit - Lower(%): 1.8 Flammability Limit - Upper(%): 9.5

Comments: Information given concerns the major ingredient.

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Avoid Heat, sparks, flames.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General information: Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation: In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact: Skin irritation is not anticipated when used normally. Repeated exposure may cause skin dryness or cracking.

Eye contact: Spray and vapour in the eyes may cause irritation and smarting.

Health Warnings: Arrhythmia, (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of entry: Inhalation.

Target Organs: Central nervous system Respiratory system, lungs

Medical Symptoms: Arrhythmia, (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

- 12.4. Mobility in soil
- 12.5. Results of PBT and vPvB assessment
- 12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information: Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard.

SECTION 14: TRANSPORT INFORMATION

General: This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities.

Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID/ADN): 1950

UN No. (IMDG): 1950 UN No. (ICAO): 1950

14.2. UN proper shipping name

Proper Shipping Name: AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class: 2, 5F

ADR/RID/ADN Class: Class 2.1: Flammable gases.

ADR Label No.: 3 IMDG Class: 2.1 ICAO Class/Division: 2.1 Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group: Not Applicable

IMDG Packing group: Not Applicable ICAO Packing group: Not Applicable

14.5. Environmental hazards

14.6. Special precautions for user

EMS: 2-13

Hazard No. (ADR): 23 Flammable gas.

Tunnel Restriction Code: (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References: The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

Statutory Instruments: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No.

716). Control of Substances Hazardous to Health. The Aerosol Dispensers Regulations 1977 & 1999

Approved Code Of Practice: Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. British Aerosol Manufacturers Code of Practice 7th. Edition 1999 Guidance Notes: Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation: Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. System of specific information relating to Dangerous Preparations. 2001/58/EC.

National Regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Safety Data Sheet Status: Approved.

Date: 15.08.2013 Risk Phrases In Full

- R34 Causes burns.
- R12 Extremely flammable.
- R10 Flammable.
- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R36/38 Irritating to eyes and skin.
- R36 Irritating to eyes.
- R37 Irritating to respiratory system.
- R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

- H319 Causes serious eye irritation.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H222 Extremely flammable aerosol.
- H220 Extremely flammable gas.
- H226 Flammable liquid and vapour.
- H332 Harmful if inhaled.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H336 May cause drowsiness or dizziness.
- H335 May cause respiratory irritation.

Disclaimer: 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 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 as to the suitability of such information for his own particular use.