# SAFETY DATA SHEET

## 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY / UNDERTAKING

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|---|---|
| Product Name: | **Lubysil B.C.O.14** |
| Company: | John Clayden & Partners (Lubysil) Ltd<br>9 Frensham Rd<br>Norwich NR3 2BT |
| Phone Number: | 01603 789924 (not 24 hours) |
| SDS compiler | claydenlubysil@aol.com |
| *Revision: 14/03/08* | Intended use: speciality metal cutting fluid |
| *Replaces SDS: 30/07/07* | |

## 2 HAZARDS IDENTIFICATION

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| Human Health Effects: | Tetrachloroethylene component - Limited evidence of carcinogenicity; high exposure by inhalation may be harmful |
| Environmental Effects: | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

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| Composition of Preparation: | Blend of mineral oil, lubricity additives and tetrachloroethylene |
| Hazardous Ingredients: | Tetrachloroethylene (EC 204-825-9)<br>Xn;Carc Cat 3: R40 N;R51,53. Concentration 25-50% |
| Exposure limit values exist for the following constituent | Tetrachloroethylene, concentration 25-50% (see section 8)<br>Mineral Oil, concentration<35% (see section 8) |

## 4 FIRST-AID MEASURES

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| Inhalation | Remove from exposure; keep warm and at rest; obtain medical attention urgently |
| Skin Contact: | Wash skin with soap and water and remove contaminated clothing. Obtain medical attention if blistering occurs. |
| Eye Contact: | If substance has got into eyes, immediately wash out with plenty of water and seek medical attention. |
| Ingestion: | Wash out mouth with water. Give water to drink (unless patient is losing consciousness). Do not induce vomiting. |
| Further medical treatment | Following significant exposure to high concentrations of vapour, avoid treatment with sympathomimetic drugs such as Adrenaline. Gastric lavage may be effective when performed within 4 hours of ingestion. Following ingestion, absorbents such as activated charcoal may be of value. |

## 5 FIRE-FIGHTING MEASURES

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| Extinguishing: | Product is non-flammable – keep containers cool by spraying with water |
| Exposure Hazards: | May give hazardous fumes of phosgene and hydrogen chloride if involved in a fire. |
| Protective Equipment for fire fighting: | Full protective clothing and self-contained breathing apparatus |

| 6 | ACCIDENTAL RELEASE MEASURES | |
|---|---|---|
| | Personal Precautions: | PVC or rubber gloves; chemical goggles; overalls. Ventilate the area to clear fumes |
| | Environmental Precautions: | Prevent entry into drains and water courses |
| | Methods for Cleaning Up: | Soak up with inert absorbent. |

| 7 | HANDLING AND STORAGE | |
|---|---|---|
| | Handling: | Use in well-ventilated area. Atmospheric levels should be controlled in compliance with occupational exposure limit. Do not breathe vapour and avoid contact with eyes, skin and clothing. Avoid contact with naked flames and hot surfaces or weld in the presence of vapours as toxic decomposition products can be formed. The usual precautions for handling chemicals should be observed. |
| | Storage: | Keep container dry. Keep in a cool, well-ventilated place and away from heat sources. |

| 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION | |
|---|---|---|
| | Exposure limit values for mist | Tetrachloroethylene: OES 345 mg/$m^3$ (8h. TWA); STEL 689 mg/$m^3$ (15min. TWA)<br>Oil mist, mineral: OES 5mg.$m^{-3}$ (8 h. TWA); STEL 10mg.$m^{-3}$ (15 min) |
| | Personal Protective Equipment: | Wear overalls and chemical goggles. Wear PVC or rubber gloves for short-term exposure or PVA or Viton gloves for prolonged exposure. Remove working clothes after work.<br>Respiratory equipment approved for organic vapours and mists if there is a risk of exposure to vapour |

| 9 | PHYSICAL AND CHEMICAL PROPERTIES | |
|---|---|---|
| | Physical State | liquid |
| | Appearance | colourless |
| | Odour | distinctive |
| | pH | neutral |
| | Boiling point/range (°C) | >120°C |
| | Flash Point (°C)(closed cup) | No flash point |
| | Flammability – autoignition temp. (°C) | No data available |
| | Explosive properties | No data available |
| | Oxidising properties | none |
| | Vapour pressure (mbar @ 20°C) | No data available |
| | Relative Density (@15.5°C) | 1.294 |
| | Solubility in water | insoluble |
| | Solubility in fat / solvent | miscible |
| | Partition coefficient (log Pow) | No data available |
| | Viscosity (mPa.s @ 20°C) | No data available |
| | Vapour density | No data available |
| | Evaporation rate | No data available |
| | Melting Point (°C) | <0 |

| 10 | STABILITY AND REACTIVITY | |
|---|---|---|
| | Stability: | Stable in normal conditions |
| | Conditions to avoid: | Avoid high temperatures |
| | Materials to avoid | Strong bases, oxidising agents. May react violently with metals such as sodium, potassium and barium. May react with freshly galvanised surfaces to produce highly toxic dichloroacetylene. |
| | Hazardous decomposition products | Contact with very hot surfaces or naked flames may produce toxic fumes of phosgene and hydrogen chloride. |

| 11 | TOXICOLOGICAL INFORMATION | |
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| | Laboratory Data: | |
| | Acute Toxicity | |
| | -oral | LD50 (oral, rat) >2000 mg/kg |
| | -inhalation | Note occupational exposure limits in section 8 – inhalation of concentrations above the OEL may lead to light-headedness, nausea and headache. |
| | -dermal | Can be absorbed through the skin |
| | Corrosivity/Irritation | |
| | -eye | May cause irritation |
| | -skin | Slight irritant – may cause dryness or cracking |
| | -respiratory tract | See acute toxicity remarks above |
| | Sensitisation | |
| | -skin | No evidence of sensitisation effects |
| | -respiratory | No evidence of sensitisation effects |
| | Repeated-dose toxicity | No data available on effects of repeated skin contact |
| | Mutagenicity | No evidence of mutagenicity |
| | Carcinogenicity | Lubysil BCO.14 contains tetrachloroethylene which is classified by EEC as a Category 3 carcinogen-substances which cause concern for man owing to possible carcinogenic effects but in respect of which the information is not adequate for making a satisfactory assessment |
| | Reproductive toxicity | No evidence of reproductive toxicity |

| 12 | ECOLOGICAL INFORMATION | |
|---|---|---|
| | Ecotoxicity | The product is rated as slightly toxic to aquatic species |
| | Mobility | Insoluble in water |
| | Persistence and degradability | Product is not expected to be biodegradable |
| | Bioaccumulative potential | Product may bioaccumulate but with short retention of the order of one week or less |
| | Other adverse effects | None known |

| 13 | DISPOSAL CONSIDERATIONS | |
|---|---|---|
| | Waste Residue: | Disposal should be in accordance with local or national legislation via an authorised waste disposal contractor to an approved waste disposal site. Classified as HAZARDOUS WASTE under HWR and LoWR. List of Waste/European Waste Catalogue ('EWC') code 12 01 06* *mineral-based machining oils containing halogens (except emulsions and solutions*) |
| | Packaging: | Dispose of through authorised waste contractor |

## 14 TRANSPORT INFORMATION

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| Transport Classification | Lubysil B.C.O.14 is classified as dangerous goods for carriage under Road, Sea and Air Carriage Regulations.<br>When packed in cans of 5 litre capacity or less, may be carried under the limited quantity provision of Road and Sea Regulations CDG, ADR, IMDG (not Air ICAO/IATA) |
| UN Number | 1897 |
| Hazard Class | 6.1 |
| Proper Shipping Name | *Tetrachloroethylene mixture* |
| Packing Group | III Transport Category (CDG, ADR): 2 |
| Marine Pollutant (IMDG) | Yes |

## 15 REGULATORY INFORMATION

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| CHIP3 Classification | Classified as hazardous, Harmful, Category 3 carcinogen and Dangerous for the environment |
| CHIP Label | |
| Label Name | Lubysil B.C.O.14 |
| Symbol | Xn, N |

HARMFUL

DANGEROUS FOR THE ENVIRONMENT

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|---|---|
| Named component | *Contains Tetrachloroethylene* |
| Risk Phrases | R40 *Limited evidence of a carcinogenic effect*<br>R51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment* |
| Safety Phrases | S23 *Do not breathe vapour/spray*<br>S36/37 *Wear suitable protective clothing and gloves*<br>S51 *Use only in well-ventilated areas*<br>S61 *Avoid release to the environment. Refer to special instructions/safety data sheet* |
| EC Number | None required for label |
| EC Directives | REACH Regulation EC 1907/2006<br>Dangerous Substances Directive 67/548/EEC and Dangerous Preparations Directive 1999/45/EC. |
| Statutory Instruments | The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3) and subsequent amendments<br>The Hazardous Wastes Regulations 2005 (HWR) and the List of Wastes Regulations 2005 (LoWR)<br>The Control of Substances Hazardous to Health Regulations 2002 |

## 16 OTHER INFORMATION

*This product safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations*

**Further references:** Occupational exposure limits (EH 40)
COSHH essentials (HSG 193)
UK HSE Guidance Notes:
INDG365 – *Working safely with metalworking fluids - a guide for employees*
HSG 231 - *Working safely with metalworking fluids - Good practice manual*
Also see: *Perchloroethylene:* http://www.eurochlor.org/upload/documents/document255.pdf

***Sections 1-3 have been amended to meet the requirements of REACH regulation EC 1907/2006***