

# SAFETY DATA SHEET



Rev. 1

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

**Product Name** Lube-Matic Liquid  
**Other Name**  
**Use** Welding Process Aid  
**Supplier** Weldwell New Zealand  
**Address** 64 Thames Street, Napier, New Zealand  
**Telephone No** +64 6 834-1600  
**Facsimile** +64 6 835-4568  
**Emergency Telephone No** 0800 CHEMCALL (0800 243 622) (24 Hours)

## 2 HAZARDS IDENTIFICATION

### Dangerous Goods

**Hazardous Substances** Methylene Chloride (Dichloromethane)

### HSNO Classifications

**Hazard Statements** Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.

### Precautionary Statements

Obtain special instructions before use.  
Avoid breathing dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation occurs: Get medical advice/ attention.  
Take off contaminated clothing and wash before reuse.  
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTRE or doctor/physician if you feel unwell, exposed or concerned.  
Store in a well-ventilated place. Keep container tightly closed.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

| <b>Chemical Entity</b>                  | <b>Cas No</b> | <b>Values</b> |
|---|---------------|---------------|
| Methylene Chloride<br>(Dichloromethane) | 75-09-2       | >90           |
| Alkyl-Aryl Siloxane Copolymer           | Mixture       | <10           |

## 4 FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.
- Skin contact:** Remove contaminated clothing and shoes. Wash exposed area thoroughly with soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Get medical attention if irritation persists.
- Eye contact:** Flush eyes immediately with water for at least 15 minutes holding the eyelids apart. If irritation persists, call a physician.
- Ingestion:** Ingestion is an unlikely route of exposure for aerosol products. If ingestion occurs rinse mouth with a small amount of water. Aspiration hazard – DO NOT Induce Vomitting. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.
- Notes to Physicians:** Adrenaline should never be given to a person overexposed to methylene chloride. The finding of chronic toxic effects in laboratory animals may indicate toxicity to humans.
- Most Important symptoms and effects, both acute and delayed:**  
Causes eye and skin irritation. Inhalation of vapours or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, drowsiness, nausea and unconsciousness. Harmful or fatal if swallowed. Overexposure may cause heart, liver, kidney, blood system and nervous system damage. Methylene chloride is converted to carbon monoxide in the body which may worsen heart disease. May cause cancer based on animal data.
- Indication of any immediate medical attention and special treatment needed:**  
Immediate medical treatment is required for inhalation or ingestion.

## 5 FIRE-FIGHTING MEASURES

- Extinguishing Media:** Use carbon dioxide, foam or dry chemical. Do not use water to extinguish fire. Water spray can be used to cool exposed containers and structures.
- Special Hazards Arising from the Substance or Mixture:**  
**Unusual Fire and Explosion Hazards:** Contents under pressure. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapours are heavier than air and may accumulate in low lying area. Combustion products are toxic and corrosive.  
**Hazardous Decomposition Products:** Combustion may produce hydrogen chloride, phosgene and silicone dioxide.
- Advice for Firefighters:** Firefighters should always wear self-contained breathing apparatus and full protective clothing for fires involving chemicals or in confined spaces. Do not allow run-off from fire fighting to enter drains or water courses. Stay up wind to avoid hazardous vapours and toxic decomposition products. Use shielding to protect against bursting containers.

## 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions, Protective Equipment and Emergency Procedures:**  
Evacuate spill area and keep unprotected personnel away. Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing as described in Section 8.

**Environmental Precautions:** Avoid contamination of soil, surface water and ground water. Do not flush to sewer! Report releases as required by local, state and federal authorities.

**Methods and Material for Containment and Cleaning Up:** Contain and collect using an absorbent material and place in an appropriate container for disposal.

**Reference to Other Sections:** Refer to Section 8 for protective equipment and Section 15 for disposal considerations.

## 7 HANDLING AND STORAGE

**Handling:** Avoid contact with the eyes, skin and clothing. Avoid breathing vapours. Do not swallow. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Do not use in poorly ventilated or confined spaces. Vapours are heavier than air and will collect in low areas. Wash thoroughly with soap and water after handling and before eating, drinking or using restroom. Keep containers closed when not in use. Keep away from excessive heat, open flames and all other high energy sources. Do not puncture or incinerate container. Do not eat, drink or smoke in work areas.

Do not cut, drill, grind or weld on or near containers, even empty containers. Follow all MSDS precautions when handling empty containers.

**Storage** Store in a cool, dry, well-ventilated area away from ignition sources. Keep containers tightly closed when not in use. Prevent moisture from entering containers. Store away from oxidizers and other incompatible materials.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name                           | Exposure Limits   |
|---|---|
| Methylene Chloride<br>(Dichloromethane) | 25 ppm TWA OSHA PEL, 125 ppm STEL<br>50 ppm TWA ACGIH TLV<br>100 ppm TWA UK OEL, 300 ppm STEL<br>75 ppm TWA Germany AGS, 300 STEL |
| Alkyl-Aryl Siloxane Copolymer           | None established  |

**Engineering Controls:** Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

**Respiratory protection:** If the exposure limits are exceeded an approved full facepiece supplied air respirator or self-contained breathing apparatus should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

**Skin protection:** Wear impervious gloves such as Viton, poly vinyl alcohol (PVA).

**Eye protection:** Chemical safety goggles and/or faceshield should be worn where splashing is possible.

**Other:** Solvent resistant boots, apron and headgear should be used to prevent contact. A safety shower and eye wash should be available in the immediate work area.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

|                          |  |
|--------------------------|--|
| Appearance               | Clear, colourless liquid                   |
| Odour                    | Mild, sweet odour                          |
| Odour Threshold          | 160 ppm (methylene chloride)               |
| pH                       | Not available                              |
| Melting / Freezing Point | Not applicable                             |
| Boiling Point            | 39.5°C                                     |
| Flash Point              | None                                       |
| Evaporation Rate         | 0.7 (ether = 1)                            |
| Flammable Limits         | LEL: 13% UEL 19%                           |
| Vapour Pressure          | 352 mmHg @ 20°C                            |
| Vapour Density           | 2.9  |
| Specific Gravity         | 1.31                                       |
| Water Solubility:        | 1.32 gm/100 gm @ 25°C                      |
| Explosive Properties     | Vapours may be explosive in confined areas |

## 10 STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Chemical Stability:</b>                 | Stable under normal storage and handling conditions.   |
| <b>Reactivity:</b>                         | Not reactive under normal conditions of use.   |
| <b>Possibility of Hazardous Reactions:</b> | Contact with moisture may yield trichloroacetic acid and hydrochloric acid   |
| <b>Conditions to Avoid:</b>                | Avoid contact with open flames, electric arc and other hot surfaces which can cause thermal decomposition.                         |
| <b>Incompatible Materials:</b>             | Avoid alkalis, acids, oxidizing agents and reactive metals such as aluminum and its alloys, zinc, magnesium, potassium and sodium. |
| <b>Hazardous Decomposition Products:</b>   | Carbon monoxide, hydrogen chloride, phosgene and chlorine.   |

## 11 TOXICOLOGICAL INFORMATION

|                              |  |
|------------------------------|--|
| <b>Toxicity information:</b> | <p><b>Eyes:</b> Vapours or mists may cause irritation, redness and tearing. Direct contact may cause temporary eye damage.</p> <p><b>Skin:</b> Liquid methylene chloride is painful and irritating if confined to skin by gloves, clothing, etc. Prolonged or repeated contact may cause irritation, defatting of skin, and dermatitis. Absorption through intact skin is possible if contact with liquid is prolonged.</p> <p><b>Ingestion:</b> Ingestion may cause mucous membrane and gastrointestinal irritation, nausea, vomiting or diarrhoea and other symptoms listed under inhalation. Aspiration into the lungs during ingestion or vomiting may cause serious lung damage which may be fatal. Alcohol consumed before or after exposure may increase adverse effects.</p> <p><b>Inhalation:</b> Inhalation of vapours or mists may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, nausea, incoordination, drunkenness, stupor, irregular heartbeat, cardiac arrest, unconsciousness and death. Overexposure may</p> |
|------------------------------|--|

cause cardiac sensitization and increased risk of cardiac arrest, adverse effects on the lungs, liver, kidney, nervous system and other internal organs. Carboxyhemoglobin levels can be elevated in persons exposed to methylene chloride causing stress on the cardiovascular system. Alcohol consumption may increase adverse effects.

|                                   |  |
|-----------------------------------|--|
| <b>Acute Toxicity Values:</b>     | <b>Methylene Chloride:</b> Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 49 mg/L/7 hr, Skin rat LD50 >2000 mg/kg.<br><b>Alkyl-Aryl Siloxane Copolymer:</b> No toxicity data available.  |
| <b>Irritation:</b>                | Methylene chloride has been shown to be irritating in humans on repeated contact particularly when sealed to the skin by shoes or tight clothing.  |
| <b>Corrosivity:</b>               | This is not a corrosive product.   |
| <b>Sensitization:</b>             | This product is not expected to cause sensitization.   |
| <b>Repeat Dose Toxicity:</b>      | Epidemiology studies of 751 humans chronically exposed to methylene chloride in the workplace, of which 252 were exposed for a minimum of 20 years, did not demonstrate any increase in deaths caused by cancer or cardiac problems. A second study of 2,227 workers confirmed these results.  |
| <b>Carcinogen Status:</b>         | Methylene chloride has been evaluated for possible cancer causing effects in laboratory animals. Inhalation studies at concentrations of 2,000 and 4,000 ppm increased the incidence of malignant liver and kidney tumors in mice. Three inhalation studies of rats have shown increased incidence of benign mammary gland tumors in female rats at concentrations of 500 ppm and above and increases in benign mammary gland tumors in males at concentrations of 1,500 ppm and above. Rats exposed to 50 and 200 ppm via inhalation showed no increased incidence of tumours. Mice and rats exposed by ingestion at levels up to 250-ppm/kg/day lifetime and hamsters exposed via inhalation to concentrations up to 3,500-ppm lifetime did not show an increased incidence of tumours.<br><br>Methylene Chloride is listed by IARC as "Possibly Carcinogenic to Humans (Group 2B) by IARC, as "Reasonably Anticipated to Be a Human Carcinogen" by NTP, as a "Confirmed Animal Carcinogen with Unknown Relevance to Humans (A3) by ACGIH, and a Carcinogen Category 2 by the European Union. It is regulated by OSHA as a carcinogen. |
| <b>Germ Cell Mutagenicity:</b>    | Methylene chloride tested positive in AMES test but negative in CHO assay and invivo micronucleus assay.   |
| <b>Toxicity for Reproduction:</b> | Methylene chloride has been shown to cause reproductive toxicity and/or birth defects only at doses that produce significant toxicity in the parent animal.  |

## 12 ECOLOGICAL INFORMATION

|                                       |   |
|---------------------------------------|---|
| <b>Toxicity:</b>                      | Methylene Chloride: LC50/96-hour Fathead Minnow - >190 mg/l   |
| <b>Persistence and Degradability:</b> | Methylene is reported to completely biodegrade under aerobic conditions with sewage seed or activated sludge between 6 hours to 7 days. 86-92% conversion to CO <sub>2</sub> will occur after a varying acclimation period using anaerobic digestion in wastewater. |
| <b>Bioaccumulative Potential:</b>     | Methylene chloride as an estimated BCF of <2 which suggests the potential for bioaccumulation is low.   |
| <b>Mobility in Soil:</b>              | Methylene chloride is expected to be highly mobile in soil.   |
| <b>Other Adverse Effects:</b>         | None known.   |

## 13 DISPOSAL CONSIDERATIONS

**Disposal:** Dispose in accordance with local and national environmental regulations.

## 14 TRANSPORT INFORMATION

|            | UN No  | UN Proper Shipping Name | Transport Hazard Class | Packing Group | Environmental Hazards |
|------------|--------|-------------------------|------------------------|---------------|-----------------------|
| US DOT     | UN1950 | Dichloromethane         | 6.1                    | III           | Not applicable        |
| EU ADR/RID | UN1950 | Dichloromethane         | 6.1                    | III           | Not applicable        |
| IMDG       | UN1950 | Dichloromethane         | 6.1                    | III           | Not applicable        |

## 15 REGULATORY INFORMATION

All of the components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC).

## 16 OTHER INFORMATION

### SDS Revision History:

10/20/11: Converted US SDS to EU REACH SDS

### GHS Phrases for Reference (See Section 2 and 3):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

### EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

Xn Harmful

Carc Cat 2 Carcinogen Category 2

R40 Possible risk of cancer.

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