SAFETY DATA SHEET

1. Identification of Material and Supplier

Product Name **Weld Aid Lubematic (Liquid)**
Part Numbers **007040**

Other Names None allocated
Recommended Use Welding Process Aid

Supplier's Name **Independent Wholesale Welding Supply**
Address **Unit 2/170 Power Street, Glendenning, NSW. 2761**
All mail to: **PO Box 284 Doonside NSW 2767**
Telephone **+61 2 8834 2400** **Facsimile** **61 2 8834 2498**
Technical Support **+61 2 8834 2400** **E-mail Address iwws@iwws.net**
Web **www.iwws.net**

2. Hazards Identification

Hazardous Classification

This product is hazardous according to the criteria of the ASCC, is a dangerous goods substance: UN 1593 Class 6 Dichloromethane PG III according to the ADG Code, is a Schedule 5 Poison according to the SUSMP and is listed on the AICS. Is not a flammable or combustible liquid according to AS1940.

EU Classification (67/548/EEC): Xn R40 (Carcinogen Category 2)

Label Elements
WARNING! Contains methylene chloride (Dichloromethane)


GHS08 (Serious Health Hazard)

Hazard Phrases

H315	Causes skin irritation.	H336	May cause drowsiness or dizziness.
H319	Causes serious eye irritation.	H351	Suspected of causing cancer
H335	May cause respiratory irritation.		

Precautionary Phrases

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist, vapours and spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye protection.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local and national regulations.

3. Composition Information on Ingredients

Chemical name	CAS Number	Proportion
Dichloromethane (methylene chloride)	75-09-2	> 90 %
Alky-Aryl Siloxane Copolymer	n.d.	<10%

4. First Aid Measures

4.1 Symptoms of Exposure by Route

Ingested Ingestion may cause mucous membrane and gastrointestinal irritation, nausea, vomiting or diarrhea and other symptoms listed under inhalation. Alcohol consumed before or after exposure may increase adverse effects.

Eyes Vapours or mists may cause irritation, redness and tearing. Direct contact may cause temporary eye damage.

Skin Splashed liquid trapped by clothing against the skin is painful and irritating. Prolonged or repeated skin contact may cause severe irritation, defatting of the skin and dermatitis. Absorption through intact skin is possible if contact is prolonged. If absorbed into the body causes adverse systemic effects.

Inhaled 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 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.

4.2 First Aid Instructions

Ingested Do not induce vomiting. Rinse mouth out with water. Do not give water to drink unless approved by a Doctor. **Seek urgent medical assistance**. If patient involuntarily vomits encourage to lean forward from the hips to avoid aspirating the vomitus.

Eyes Hold eyelids open and flush eyes with clean water for 15 minutes. Hold eyelids open and away from eye to ensure that the inside of the lids are carefully flushed clean. If symptoms persist or corneal damage is present seek prompt medical advice.

Skin Remove contaminated clothing (under deluge shower if necessary). Wash affected area for 10 minutes with soap and water. Do not rub hard. Rinse well for a further 5 minutes and pat dry. If symptoms persist seek prompt medical advice

Inhaled Remove patient to fresh air. Loosen tight clothing and allow to rest. Treat for shock if required. Rinse mouth and nose with water. Provide artificial respiration if breathing stops. Unless recovery is prompt **seek urgent** medical advice.

First Aid Facilities Provide normal industrial first aid facilities including eyewash stations and deluge showers, where appropriate, close to the area where product is in use.

Notes to Physician (for symptoms of over-exposure to this product see above)

Possible symptoms of Chronic Health Effects

Principal routes of exposure are skin contact/absorption and inhalation of vapour. Is stored in body fat and metabolised to carbon monoxide. This reduces the oxygen carrying capacity of the blood. May cause kidney and liver damage (noted in animals but not reported in humans).

Possible aggravated pre-existing conditions

Persons with pre-existing liver or kidney damage should not work with this product.

Suggested treatment for acute symptoms, known antidotes

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.

Provide supportive care and treatment based on the patient's reactions to the exposure. For further information contact the:

POISONS INFORMATION CENTRE 13 11 26

5. Fire Fighting Measures

5.1 Flammability and Explosion Hazards
Liquid is non-flammable. Concentrated vapours can be ignited by a high intensity ignition source in an enriched oxygen atmosphere. Vapours are heavier than air and will collect in low-lying places.

5.2 Hazardous Combustion Products
Hydrogen Chloride, Phosgene and Silicon Dioxide

5.3 Suitable 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. **Hazchem Code:** 2 Z

5.4 Precautions for Fire Fighters and Special Equipment
Wear full turn out uniform and SCBA. Avoid contact with product or run-off. o not allow run-off from fire fighting to enter drains or water courses. Stay upwind to avoid hazardous vapors and toxic decomposition products.

6. Accidental Release Measures

6.1 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.
6.2 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.
6.3 Methods and Material for Containment and Cleaning Up:
Contain and collect using an absorbent material and place in an appropriate container for disposal.
6.4 Reference to Other Sections:
Refer to Section 8 for protective equipment and Section 15 for disposal considerations.

7. Handling and Storage

7.1 Precautions for Safe Handling:
Avoid contact with the eyes, skin and clothing. Avoid breathing vapors. 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. Vapors 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 eat, drink or smoke in work areas. Do not cut, drill, grind or weld on or near containers, even empty containers. Do not reuse empty containers. Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

7.2 Conditions for Safe Storage, Including any Incompatibilities:
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.
Do not store product in aluminum, zinc, aluminum alloys and plastic containers. Contact with aluminum parts in a pressurized system may cause violent reactions.

8. Exposure Controls/ Personal Protection

8.1 Exposure Standards
An exposure standard for the product has not been set by the ASCC. The standard for the primary ingredient is :

Substance	***TWA***	***STEL***
Methylene Chloride (Dichloromethane) Skin Absorb. Category 2 B (Probable human carcinogen)	174 mg/m³	n.est.

8.2 Engineering Control Methods
Provide local exhaust fume extractors and ventilators capable of maintaining the workplace below the exposure limit.

8.3 Personal Protective Equipment

Respiratory Protection	Wear Respirator fitted with an organic vapour filter if exposure standards may be exceeded (even for short periods). Wear SCBA in poorly ventilated or confined spaces. Wear SCBA or air-supplied hood for clean up of spills
Gloves	Wear Viton or PVA gloves to AS 2161.1
Eye Protection	Unless wearing a full-face respirator wear safety glasses with side shields, goggles or full-face shield (where splashes are likely) to AS 1337.
Clothing	Wear Tyvec or cotton coveralls fastened at the neck and wrists. Supplement with acid or waterproof apron as appropriate.
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
Melting Point	n.a.	**Boiling Point**	39.5ºC
Specific Gravity	1.31 @ 25ºC	**Density**	1.32
Flash Point	None	**Flammability Limits**	12 - 19 % v/v @ 100ºC
Vapour Pressure	46.5 kPa	**Vapour Density**	2.93
Solubility (H_20)	1.32gm/100gm @25ºC	**AS1940 Class**	n.a.

10. Stability and Reactivity

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

11. Toxicological Information

Acute Toxicity Values:
Methylene Chloride: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 49 mg/L/7 hr, Skin rat LD50 >2000 mg/kg.
Alkyl-Aryl Siloxane Copolymer: No toxicity data available
Irritation: Methylene chloride has been shown to be irritating in humans on repeated contact particularly when sealed to the skin by shoes or tight clothing.
Sensitisation: This product is not expected to cause sensitisation.
Repeat Dose Toxicity: 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.
Carcinogen Status: 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 tumors. 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 tumors.
Methylene Chloride is listed by IARC as "Possibly Carcinogenic to Humans (Group 2B) and as a Carcinogen Category 2 by the EU. The IARC or the CLP Regulation (EC) No 1272/2008 classifies none of the other ingredients as carcinogens.
Germ Cell Mutagenicity: Methylene chloride tested positive in AMES test but negative in CHO assay and in vivo micronucleus assay.
Toxicity for Reproduction: 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 Considerations

12.1 Toxicity:
Methylene Chloride: LC50/96-hour Fathead Minnow - >190 mg/l, 48 hr LC50 daphnia magna 27 mg/L

12.2 Persistence and Degradability:
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 CO2 will occur after a varying acclimation period using anaerobic digestion in wastewater.

12.3 Bioaccumulative Potential:
Methyene chloride as an estimated BCF of <2 which suggests the potential for bioaccumilation is low.

12.4 Mobility in Soil:
Methylene chloride is expected to be highly mobile in soil.

13. Disposal Considerations

Disposal must be in accordance with local regulations for hazardous wastes.

14. Transport Information

Transport as UN1593 Class 6.1 PG III in accordance with the ADG Code & Regulations, the IMDG Code or the IATA DG Regulations as appropriate to the mode of transport.

15. Regulatory Information

Label in accordance with the ADG Code with the Class 6 Diamond and the Shipping Name: Dichloromethane and UN Number: 1593. Labeling requirements under the *SUSMP* or the *"National Code of Practice for the Labeling of Workplace Substance" [ASCC: 2012 (1994)]* do not apply to this product as sold.

16. Other Information

Disclaimer
No representative of IWWS any other person has the authority to alter or amend this MSDS or the information contained therein without the prior approval of IWWS management. Any alterations render this document invalid. The information presented in this MSDS is believed by Independent Wholesale Welding Supply to be accurate at the date shown and in accordance with information available to the Company. The circumstances and methods of using, handling, transporting or storing the material are beyond our control and persons using, handling, transporting or storing the product do so at their own risk. Independent Wholesale Welding Supply accepts no liability for damage or injury arising from the use of the information contained herein.

Original Date of Issue: 26/11/2006	SDS (Version 1.2) to comply with Model Code of Practice - Preparation of Safety Data Sheets for hazardous chemicals.

Data Sources used: in the preparation of this MSDS may include: *Information as supplied by U.S Manufacturer: Weld-Aid Products,14650 Dequindre, Detroit, MI USA 48212.The National Model Regulations for the Control of Workplace Hazardous Substances* [NOHSC:1005(1994)], *Approved Criteria for Classifying Hazardous Substances* [NOHSC(1008:2004)] *3rd Edition* (the Approved Criteria), http://hsis.ascc.gov.au/SearchHS.aspx. "*List of Designated Hazardous Substances"* NOHSC 10005:1999, *"National Exposure Standards"* NOHSC 1003:1995. Safework Australia website: http://hcis.safeworkaustralia.gov.au

Abbreviations used: n.d = not determined, n.a = not applicable, n.all =not allocated, SUSMP=Standard for the Uniform Scheduling of Medicines and Poisons, ADG=Australian Dangerous Goods Code, IATA =International Air Transport Association, (Dangerous Goods Regulations), IMDG=International Maritime Dangerous Goods (Code), ASCC=Australian Safety and Compensation Council. IARC=International Agency (for) Research (of) Cancer.