MATERIAL SAFETY DATA SHEET

1. Identification of Material and Supplier

Product Name Weld Aid FracSure NDT Penetrant

Part Number P-007

Other Names None allocated

Recommended Use Welding Inspection 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

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2. Hazards Identification

Hazardous Classification

This product is hazardous according to the criteria of the ASCC, is a DG Substance: UN 1950 Class 2.1 Flammable Aerosols. Is a Scheduled poison according to the SUSMP, is a flammable aerosol according to AS 1940 and all components are listed on the AICS.

Classification: F+ Extremely Flammable, Carc.Cat.3: Xn Harmful, N Dangerous for the environment.

Risk Phrases

R12 Extremely flammable. R40 Limited evidence of a carcinogenic effect. R65 Harmful: may cause lung damage if swallowed. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases

S2 Keep out of reach of children. **S23** Do not breathe fumes /spray - **S24** Avoid contact with skin. **S36/37** Wear suitable protective clothing and gloves. **S46** If swallowed, seek medical advice immediately and show this container or label. **S60** This material and its container must be disposed of as hazardous waste. **S61** Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets. **S62** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

3. Composition Information on Ingredients

Chemical name	CAS Number	Proportion
Kerosene	8008-20-6	80 - 100 %
Propane/Isobutane/n-Butane Propellant	68476-86-8	1 - 20 %
Naphthalene	91-20-3	0.1 – 1%

E. O. O. NDT D. O. C.	1/2 1 - 2 - 4 - 0 - E/4 4 / 4 E	D 4 - C 0
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4. First Aid Measures

4.1 Symptoms of Exposure by Route

ACUTE:

Ingested Not a normal route for exposure in aerosol products. Ingestion of the liquid may cause

gastrointestinal irritation, nausea, vomiting or diarrhea. Aspiration into the lungs during

ingestion or vomiting may cause serious lung damage which may be fatal.

Eyes Vapors or mists may cause mild irritation with redness and tearing.

Skin Prolonged skin contact may cause irritation, defatting of the skin or dermatitis.

Inhaled Inhalation of vapors or mists may cause mucous membrane and respiratory irritation.

Overexposure may cause headache, dizziness, drowsiness, depressed respiration and heart rate, heart rhythm irregularities, shortness of breath, unconsciousness or death. Aspiration during swallowing or vomiting may cause lung damage. May cause cancer based on animal

data.

4.2 First Aid Instructions

Ingested Do not induce vomiting unless following medical directions. Rinse mouth out with a small

amount of water. Seek immediate medical assistance.

Eyes Hold eyelids open and flush eyes with clean water for 15 minutes. Remove contact lenses if

present. 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. Unless recovery is

prompt seek medical attention.

First Aid Provide normal industrial first aid facilities including eyewash stations and deluge showers,

Facilities 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

None reported for product.

Possible aggravated pre-existing conditions

None reported for product.

Suggested treatment for acute symptoms, known antidotes

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

Contents under pressure. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may and accumulate in low lying area.

5.2 Hazardous Combustion Products

Combustion may produce carbon monoxide and carbon dioxide.

5.3 Suitable Extinguishing Media

Use water spray, carbon dioxide, dry chemical or foam to extinguish fire.

Cool fire exposed containers with water.

Hazchem Code: 2YE

5.4 Precautions for Fire Fighters and Special Equipment

Wear SCBA and full turn out uniform. Do not allow run-off from fire fighting to enter drains or water courses. Use shielding to protect against busting containers.

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:** Do not flush to sewer. Avoid release to the environment. 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. Leaking cans should be placed in a plastic bag or open pail in a well-ventilated area until the pressure has dissipated.

7. Handling and Storage

7.1 Handling Advice

Avoid contact with the eyes. Avoid prolonged and repeated contact with skin. Avoid breathing vapors and mists. DO NOT SWALLOW. Wear protective clothing and equipment as described in Section 8. Use 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. Contents under pressure. Do not puncture or incinerate container. Do not cut, drill, grind or weld on or near containers, even empty containers. Follow all SDS precautions when handling empty containers.

7.2 Storage Advice

Store in a cool, dry, well ventilated area away from ignition sources. Do not store above 50°C (120°F). Keep away from heat, sparks and open flames. Store away from direct sunlight.

8. Exposure Controls/ Personal Protection

8.1 Exposure Standards

An exposure standard for the product or the ingredients has been set by the ASCC.

Substance	<i>TWA</i>	STEL
Methyl Ethyl Ketone	445 mg/m³	890 mg/m³
Napthalene	52 mg/m³	79 mg/m³

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

8.3 Personal Protective Equipment (PPE):

Respiratory Protection: None needed under normal conditions of use. For operations where the occupational exposure limits are exceeded an approved organic vapor 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: None required for normal use. Wear impervious gloves such as butyl rubber or nitrile for prolonged or repeated skin contact.

Eye Protection: Chemical safety goggles should be worn if contact is possible. Eye flushing facilities should be available in the work area.

Other: Protective clothing if needed to avoid prolonged or repeated skin contact.

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9. Physical and Chemical Properties

Appearance Opaque purple liquid Odour solvent odour

Melting Point n.a. Boiling Point n.a.

Flash Point -96.4°C (-141°F)(Propellant) Flammability Limits LEL: n.a UEL: n.a

Relative Density0.768Autoignition Temp:n.aVapour Pressuren.d.Vapour Density>1Solubility (H20)Insoluble.AS1940 Class2.1

Other Properties: Vapours may be explosive in confined areas. VOC Content: 99.55%

10. Stability and Reactivity

In normal use and handling the product is stable.

Conditions to Avoid: Keep away from heat, sparks and open flames. Do not store in direct sunlight.

Incompatible Materials: Avoid oxidizing agents acids and bases.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11. Toxicological Information

Acute Toxicity Values:

Kerosene: Oral rat LD50 >5000 mg/kg; Dermal rabbit >2000 mg/kg; Inhalation Rat LC50 >5.28 mg/L/4 hr

Propellant: Inhalation rat LC50 31 mg/L/4 hr (structurally similar chemical) Naphthalene: Oral rat LD50 533 mg/kg, Inhalation rat LC50 0.4 mg/L/4 hr (highest attainable concentration), Dermal rat LD50 >2500 mg/kg

Irritation: Kerosene is not irritating to rabbit eye. Kerosene is irritating to rabbit skin.

Sensitisation: Kerosene is did not cause sensitization in the Buehler test in guinea pigs. None of the components are respiratory or skin sensitisers.

Repeat Dose Toxicity: In a 13 week inhalation study, rats were exposed to 1000 – 10000 ppm propellant. No treatment related effects were seen. NOAEC 10000 ppm.

Carcinogen Status: Kerosene is classified as a "Confirmed Animal Carcinogen with Unknown Relevance to Humans", A3 by ACGIH. Naphthalene is classified by IARC as "Possible Carcinogen to Humans" Group 2B, as "Reasonable Anticipated to Be a Human Carcinogen" by NTP and as a "Confirmed Animal Carcinogen with Unknown Relevance to Humans", A3 by ACGIH. None of the other components greater than 0.1% are listed as carcinogens by IARC, NTP, ACGIH, OSHA or the EU Substances Directive.

Germ Cell Mutagenicity: Propellant is considered non-mutagenic based on test results of structurally similar chemicals. Kerosene was negative in the AMES test, in an in vitro mammalian cell gene mutation assay, and in an in vivo chromosome aberration assay.

Toxicity for Reproduction: In a 13 week reproductive study, rats were exposed to 100-10000 ppm of propellant. No treatment related effects were seen. NOAEC 10000 ppm for male and female reproductive toxicity. In a reproductive study with kerosene, rats administered kerosene in drinking water. Treated males (750, 1500, or 3000 mg/kg) were mated with untreated females and treated females (375, 750, or 1500 mg/kg) were mated with unmated males. The test compound caused perianal dermatitis (high-dose only) and stomach hyperplasia (mid- and high-dose) in the female rat. There were no treatment-related effects on reproduction or sperm parameters in males. There were no effects on reproduction, gestation, or litter size in females. NOEL 750 mg/kg. In a developmental toxicity study, undiluted kerosene was administered to rats by gavage at 500, 1000, 1500, or 2000 mg/kg from days 6 through 15 of gestation. The kerosene did not significantly increase the incidence of malformations or variations compared to the control nor was the sex ratio altered. NOAEL 1000 mg/kg

12. Ecological Considerations

Toxicity:

Kerosene: 96 hr LL50 Oncorhynchus mykiss 2.5 mg/L, 48 hr daphnia magna 1.4 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata 1.3 mg/L Propellant: 96 hr LC50 fish 147.54 mg/L (QSAR study), 48 hr daphnia 16.33 mg/L (QSAR study); 96 hr EC50 mg/L (QSAR study)

Naphthalene: 96 hr LC50 Pimephales promelas6.08 mg/L, 48 hr EC50 daphnia magna 2.16 mg/L

Kerosene is not readily biodegradable (58.6% in 28 days). Propellant is expected to partition to the atmosphere.

Kerosene has a calculate BCF of 70-5000 which suggests the potential for bioaccumulation in aquatic organisms is moderate to high.

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13. Disposal Considerations

Disposal must be in accordance with local and national environmental regulations.

14. Transport Information

Transport as UN 1950 Class 2.1 Flammable Aerosols 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 as a DG Substance according to the ADG Code with Class 2.1 Diamond and the phrase UN 1950 Class 2.1 Flammable Aerosol.

Labeling requirements under the SUSMP or the "National Code of Practice for the Labeling of Workplace Substance" [ASCC: 2012 (1994)] apply to this product as sold.

Label Elements: DANGER!



Contains Kerosene

Hazard Statements

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

Suspected of causing cancer

Toxic to aquatic life with long lasting effects.

Precautionary Statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, sparks, open flames and hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing mist, vapors or spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves.

IF SWALLOWED: Immediately call a POISON CENTER.

Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor if you feel unwell.

IF exposed or concerned: Get medical attention.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 120 °F.

Store locked up.

Store locked up.

Dispose of contents or container in accordance with local and national regulations.

16. Other Information

Disclaimer

No representative of IWWS any other person has the authority to alter or amend this SDS or the information contained therein without the prior approval of IWWS management. Any alterations render this document invalid. The information presented in this SDS 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 accept no liability for damage or injury arising from the use of the information contained herein.

Original Date
New SDS (Version 1.0) to comply with National Code of Practice for the Preparation of Safety Data Sheets December 2011.

Data Sources used: in the preparation of this SDS include: Manufacturers original US SDS.. "List of Designated Hazardous Substances" NOHSC 10005:1999, "National Exposure Standards" NOHSC 1003:1995. Standard for the Uniform Scheduling of Medicines and Poisons, ADG Code, Safework Australia Hazardous Substances Information System - http://www.hsis.safeworkaustralia.gov.au

Manufacturer Identification: Weld-Aid Products 14650 Dequindre Detroit, Michigan

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.