# Material Health & Safety Datasheet

WARTON METALS LIMITED

| Section 1. Identification of the substance / preparation and of the company / undertaking | |
|---|---|
| Product Name: | Warton Fluxes |
| Manufactured By: | Warton Metals Limited<br>Grove Mill, Commerce Street. Haslingden. Lancashire. BB4 5JT. ENGLAND. |
| Emergency Telephone: | +44 (0)1706 218888 |
| Emergency Fax: | +44 (0)1706 221188 |

| Section 2. Composition / Information on Ingredients | |
|---|---|
| Isopropyl Alcohol (IPA) | CAS No: 67-63-0 EINECS No: 200-661-7 Propan-2-OL( Isopropyl Alcohol) R 36 - Irritating To Eyes EEC Symbol - Xi Weight 99%. |
| Activators & inhibitors | <10%. |

| Section 3. Hazards Identification | |
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| Health Hazards | Irritating To Eyes, May cause lung damage if swallowed. |
| Physical & Chemical / Fire & Explosion Hazards: | Extreme hazard. Leaks of gas or spills of liquid can readily form flammable mixtures at temperatures at or above the flash point. |

| Section 4. First Aid Measures | |
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| Inhalation: | Using approved respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention. |
| Skin Contact: | Flush with large amounts of water: use soap if available. Remove grossly contaminated clothing, including shoes and launder before reuse. |
| Eye Contact: | Immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention. |
| Ingestion: | If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention. |

| Section 5. Fire Fighting Measures | |
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| Suitable extinguishing media: | Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect men attempting to stop a leak. Either allow fire to burn under controlled conditions or extinguish with alcohol type foam or dry chemical. Try to cover liquid spills with foam. |
| Protective measures: | See section 4 "First Aid Measures" and section 10 "Stability and Reactivity". |

| Section 6. Accidental Release Measures | |
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| Personal precautions: | Eliminate sources of ignition. Warn occupants of downwind areas of fire and explosion hazard. Prevent liquid from entering sewers, watercourses, or low areas. |
| Environmental precautions: | Keep public away. Shut off source if possible to do so without hazard. |
| Methods of clearing up: | Advise police if substance has entered a watercourse or sewer<br>Or has contaminated soil or vegetation. Take measures to minimise the effect on the ground water.<br>Contain spilled liquid with sand or earth. Dilute contained spill with water. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. If liquid is too viscous for pumping, scrape up with shovels or pails and place in suitable containers for recycle or disposal.<br>Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.<br>See section 4 " First Aid Measures" and section 10 "Stability and Reactivity". |

| Section 7. Handling & Storage | |
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| Storage / Transport Temperature °C: | Ambient |
| Loading/Unloading Temperature (°C): | Ambient |
| Viscosity (ost): | 2.65 |
| Storage Transport Pressure (Kpa): | Atmospheric |
| Electrostatic Accumulation Hazard: | Yes, Use proper grounding procedure. |
| Usual Shipping Containers: | Tank cars, tank wagons, barges or drums. |
| Storage, Handling and General Notes: | Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. DO NOT store or handle near an open flame, sources of heat, or sources of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Empty product containers may contain product residue. DO NOT reuse containers without commercial cleaning or reconditioning. |

| Section 8. Exposure Controls & Personal Protection | |
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| Workplace Exposure Limits: | The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above the ambient temperatures or otherwise to maintain ambient concentration below recommended threshold exposure limits. |
| Threshold Limit Value (TLV): | The ACGIH recommends a TWA of 400 ppm (980 mg/m³), and a STEL of 500 ppm (1225 mg/m³) for Isopropyl Alcohol. |
| Personal Protection: Respiratory Protection: | For open systems where contact is likely:-<br>Use NIOSH/MSHA approved organic vapour cartridge half mask respirator for excessive concentration up to 10 times the exposure limits. Wear long sleeves, chemical resistant gloves and chemical goggles. Where contact may occur, wear safety glasses with side shields. A neoprene apron should be worn where the potential for splashing exists. |

| **Section 8. Exposure Controls & Personal Protection** | |
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| Ventilation To Be Used: | Local exhaust, maintain exposure below PEL/TLV's.<br>Where concentrations in air may exceed the limits given in this section, and engineering, work practise or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent over exposure by inhalation. |

| **Section 9. Physical & Chemical Properties.** | | | |
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| Physical State: Form/Colour: | Liquid Clear, Colourless | Explosive Limits (in air): | 1.8-12.0 VOL% |
| Odour: | Alcohol Odour | Vapour Density (1013 | Approximately |
| pH (°C): | 6 | Kpa/air+1): | >1.00kpa |
| Freeze / Melt Point: | -85.00 ºC | Solubility In Water (20°C): | <99 wt% |
| Flashpoint (TCC): | <19ºC | Evaporation Rate (n-Bu | 2.500 |
| Auto-ignition Temperature: | >350ºC | Acetate=1): | |

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| **Section 10. Stability & Reactivity** | |
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| Hazardous Polymerisation?: Conditions To Avoid | No |
| Polymerisation: | Not applicable |
| Stability: | Stable |
| Conditions To Avoid Instability: | Not applicable |
| Materials & Conditions To Avoid (incompatibility): | Strong oxidising agents. |
| Hazardous Decomposition Products: | None |

| **Section 11. Toxicological Information** ( toxic effects arising from exposure based on experimental and non experimental data) | |
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| Inhalation: | Vapour concentration above recommended exposure levels are irritating to eyes and the respiratory tract, may cause dizziness. |
| Skin contact: | Low order of toxicity. Frequent or prolonged contact may irritate and cause dermatitis. |
| Eye Contact: | Irritating, and will injure eye tissue if not removed promptly. |
| Ingestion: | Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema. Minimal toxicity. |

| **Section 12. Ecological Information** | |
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| Possible environmental effects | Not relevant |

| **Section 13. Disposal Considerations** | |
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| (Safe disposal of product, its residues and packaging materials): | The following advice only applies to the product as supplied. Empty drums should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. care should in any case be taken to ensure compliance with EC, national and local regulations. This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. |

| **Section 14. Transport Information** | | | |
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| | Land (railway, road, such as RID/ADR) ADR/RID Class, | EMS Number | 3-06 |
| | | MFAG: | 305**:** |
| Item: | 3, 3b | Marine Pollutant | No |
| Empty Containers | : 3,41 | Risk Label: | 3 |
| Danger Number | 33 | Packaging | Group:II |
| Danger Label: | 3**:** | IMDG Code Page | 3244 |
| Max. KG Exempt | 333 | Proper Shipping Name: | Isopropanol(Isopropyl Alcohol). |
| Substance ID Number: | 1219 | *AIR* (ICAO/IATA) Class: | 3 |
| Transport Document Name: | Isopropanol (Isopropyl alcohol). | Passenger Packing Instruction | 305/Y305 |
| | | Passenger Max.Quantity pack | 5L/1L |
| *SEA* (IMDG) UN Number: | 1219 | Pack:Cargo Packing Instruction: | 307 |
| IMO Class: | 3.2**:** | Cargo Max. Quantity/Pack: | 60L |

| **Section 15. Regulatory Information** | |
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| Labelling Information | Dangerous Substances Directive 67/548/EEC, as modified. |
| Indication of danger: | |
| Contains: | |
| Risk phrases: | HIGHLY FLAMMABLE / F  / IRRITANT / Xi  |
| Safety phrases: | Label Name: Propan-2-OL (Isopropyl Alcohol).<br>R11 - Highly Flammable R36 - Irritating to Eyes<br>SO7 - Keep Container Tightly Closed. S16 - Keep away from sources of ignition - NO SMOKING.<br>S25 - Avoid Contact with eyes. S43B - In case of fire use sand, earth, chemical powder or alcohol type foam. |

| **Section 16. Other Information** | |
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| Recommended uses and restrictions: | The information on IPA eye irritancy has been communicated in 1990 to Competent Authorities in the European Union together with a proposal to change the classification of this substance to: Xi (Irritant), R36 (Irritating to eyes).<br>The classification of IPA as shown on the labels is in concurrence with our proposal. |
| Publications references: | |

| **Section 17. Revision Dates** | |
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| Revised Date / Initials/Replacing: | April 2002 / VHM . All previous health and safety datasheets |
| Legend: | N/A = Not applicable or available at time of printing. N/D = Not determined or not determinable.<br>Est. = Estimated |

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