

## MATERIAL SAFETY DATA SHEET

|   |   |   |
|---|---|---|
| 1 | <b>PRODUCT NAME<br/>REF (MSDS 11)</b>   | <b>HYDROLAP</b>   |
|   | <b>Description</b>  | Supplied as a metal working lubricant/coolant for use in suitable industrial applications only. The product should be diluted with water in the recommended concentration which should not exceed 15% by volume unless by specific recommendation.  |
|   | <b>Supplied by:</b>   | Lapmaster International Ltd<br>Lee Mill Industrial Estate<br>Ivybridge<br>Devon PL21 9EN<br>Tel: + 44 1752 893191<br>Fax: + 44 1752 896355  |
| 2 | <b>Information on Ingredients</b>   | General: Performance additives. Fungicide. Antifoam.<br><br>Hazardous: 2 –aminoethanol X, (R20,36/37/38), %<br>OES 8mgm <sup>-3</sup> 5.0-10.0  |
| 3 | <b>Hazards Identification:</b>  | This product is not classified as hazardous under current legislation. May cause mild irritation following skin or eye contact with undiluted product.  |
| 4 | <b>First Aid Measures:</b><br>EYES:<br><br>SKIN:<br><br>INHALATION:<br><br>INGESTION: | Hold eyes open for at least 15 minutes under running water. If irritation persist, obtain medical attention.<br><br>Wash off neat product promptly with soap and water. Contact with diluted product should be washed as directed by good standards of industrial hygiene. Remove contaminated clothing and wash before re-use.<br><br>In extreme cases, remove from exposure. If patient is feeling ill, seek medical attention.<br><br>DO NOT INDUCE VOMITING. Give milk or water and obtain immediate medical attention showing this |

|   |  |  |
|---|--|--|
|   | PRESSURE INJECTION:  | sheet.<br><br><b>OBTAIN IMMEDIATE MEDICAL ATTENTION<br/>EVEN IF INJURY APPEARS MINOR</b>   |
| 5 | <p><b>Fire-fighting Measures:</b></p> <p>Suitable extinguishing media:</p> <p>Unsuitable extinguishing media:</p> <p>Special exposure hazards:</p> <p>Combustion products:</p> <p>Special Protective Equipment</p> | <p>Dry chemical, CO<sub>2</sub>, foam and sand.</p> <p>None anticipated.</p> <p>Combustible after evaporation of water</p> <p>Carbon dioxide, carbon monoxide and partially oxidised organic fragments of the product's main ingredients.</p> <p>Self-contained breathing apparatus should be worn in fire conditions.</p> |
| 6 | <p><b>Accidental Release Measures:</b></p> <p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Methods for cleaning up:</p>  | <p>Wear suitable protective clothing.</p> <p>Do not allow spillage to enter sewers, rivers or open water.</p> <p>Contain and absorb with inert material, shovel to disposal. Do not allow the area to remain slippery with product residues.</p>   |
| 7 | <p><b>Handling and Storage:</b></p> <p>Handling precautions:</p> <p>Storage precautions:</p>   | <p>Handle and open container with care. Avoid contact with skin and eyes. Provide suitable mechanical equipment for the safe handling of drums.</p> <p>Good indoor storage conditions. Keep in tightly closed, clearly labelled containers.</p>  |
| 8 | <b>Exposure Controls/Personal</b>  |  |

|   |  |  |
|---|--|--|
|   | <p><b>Protection:</b></p> <p>Occupational Exposure limits:</p> <p>Eyes:</p> <p>Skin:</p> <p>Inhalation:</p> <p>Industrial Hygiene:</p>   | <p>2-aminoethanol X, (R20/36/37/38), OES 8mgm<sup>-3</sup></p> <p>Goggles should be worn when handling the neat material and when splashing of the diluted material is likely.</p> <p>Gloves are recommended where contact with the neat material occurs. The use of gloves or suitable barrier creams is also recommended where prolonged or repeated contact with the diluted product is inevitable.</p> <p>Local exhaust ventilation is recommended when excessive product misting occurs</p> <p>Goods standards of industrial hygiene together with the use of after-care creams are recommended for use of the diluted product.</p> |
| 9 | <p><b>Physical and Chemical Properties:</b></p> <p>Physical Form:</p> <p>Odour:</p> <p>Pour Point:(° C):</p> <p>pH-concentrate:</p> <p>Vapour Pressure(kPa):</p> <p>Miscibility with Water:</p> <p>Viscosity cS:</p> <p>Flash Point (°C, Open Cup):</p> <p>Explosive Properties %:</p> <p>The data given here is typical for</p> | <p>Liquid      <b>Appearance:</b> Transparent Yellow</p> <p>Mild      <b>Specific Gravity(@15.5°C):</b> 1.05</p> <p>-17      <b>Boiling Point( °C):</b> &gt;100</p> <p>10.5.      <b>pH-working strength:</b> 9.9@3%</p> <p>&lt;Water      <b>Vapour Density (air=1):</b> &gt;Air</p> <p>Miscible      <b>Evaporation Rate (nBuAc=1):</b> &lt;Water</p> <p>Not applicable      <b>Autoflammability,° C:</b> Not determined</p> <p>Not applicable (water based Product).( &gt;100 after evaporation.</p> <p>Not determined.</p> <p>this material. It does not constitute a specification.</p>   |

|    |   |   |
|----|---|---|
| 10 | <p><b>Stability and Reactivity:</b></p> <p>Chemical Stability:</p> <p>Conditions to avoid:</p> <p>Materials to avoid:</p> <p>Hazardous decomposition Products:</p>  | <p>The product is stable and not subject to polymerisation.</p> <p>Avoid overheating.</p> <p>Avoid strong oxidising agents.</p> <p>Product does not decompose at ambient temperature.</p>   |
| 11 | <p><b>Toxicological Information</b></p> <p>Health effects:</p> <p>Eyes:</p> <p>Skin:</p> <p>Inhalation:</p> <p>Ingestion:</p> <p>Chronic:</p> <p><b>SPECIAL HAZARDS OF PRODUCTS AFTER USE:</b></p> <p>Pressure Injection:</p> | <p>The following toxicological assessment is based on knowledge of the toxicity of the product's components.</p> <p>May be irritating to the eyes.</p> <p>Prolonged or repeated contact with conditions of poor industrial hygiene may cause irritation.</p> <p>Inhalation of mists may cause irritation.</p> <p>Ingestion of large quantities may cause nausea and sickness.</p> <p>Prolonged or repeated contact with conditions of poor industrial hygiene may cause irritation</p> <p>Product may become contaminated with hazardous metals depending upon conditions of use. These may introduce an increased risk to health via allergic skin reaction or exposure to excessive mist.</p> <p>Injection of all products will cause severe internal damage if not properly treated.</p> |
| 12 | <p><b>Ecological Information:</b></p>   |   |

|    |  |   |
|----|--|---|
|    | <p>Mobility:</p> <p>Persistence and degradability:</p> <p>Bioaccumulative potential:</p> <p>Ecotoxicity:</p>   | <p>Mobile liquid, involatile, miscible with water.</p> <p>&gt;90% degradable.</p> <p>This material is unlikely to bioaccumulate.</p> <p>Not considered dangerous to the environment.<br/>COD = 461,000MG/L.</p>               |
| 13 | <p><b>Disposal Considerations:</b><br/>Disposal must be in accordance with local and national legislation.</p> <p>Unused material:</p> <p>Used material:</p> <p>Empty packaging:</p> | <p>The product should be removed by approved waste contractors.</p> <p>The product should be removed by approved waste contractors.</p> <p>All packaging should be disposed of in a manner acceptable to the authorities.</p> |
| 14 | <p><b>Transport Information:</b><br/>Classification for transport:</p> <p>UN number:</p> <p>IMO Class:</p> <p>ICAO/IATA Class:</p> <p>ADR/RID Class:</p> <p>Marine pollutant:</p>    | <p>Not classified.</p> <p>Not applicable.   Packing Group: Not applicable</p> <p>Not applicable</p> <p>Not applicable.</p> <p>Not applicable.</p> <p>No</p>   |
| 15 | <p><b>Regulatory Information:</b><br/>Classification for supply:</p> <p>Risk phrases:</p>  | <p>Not classified</p> <p>Not applicable.</p>  |

|    |  |  |
|----|--|--|
|    | <p>Safety phrases:</p> <p>Note:</p> <p>Statutory Instruments:</p>  | <p>Not applicable.</p> <p>Not applicable.</p> <p>The Health &amp; Safety at Work etc Act 1974<br/>Control of Substances Hazardous to Health Regulations 1988.<br/>Environmental Protection Act 1990.<br/>Chemical (Hazard Information and Packaging) Regulations 1993.</p> |
| 16 | <p><b>Other information</b></p> <p>This information is taken from sources believed to be accurate. Lapmaster International Ltd, however, makes no warranty as to the accuracy of the information or suitability of the recommendations as to your operations and assumes no liability to any user thereof.</p> |  |