

MATERIAL SAFETY DATA SHEET

| 1. PRODUCT AND COMPANY IDENTIFICATION | |
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| Trade Name | MET-L-COOL WS 500N |
| Manufacturer/Supplier | ITW Chemin, ITW INDIA LIMITED |
| Address | Plot No: 34 to 37, Phase- 2, IDA, APIIC, Pashamylaram, Medak, Dist- 502307, (35 kms from Hyderabad), Andhra Pradesh, INDIA |
| Phone Number | +91 8455 224700/224701 |
| Fax Number | +91 8455 224705 |
| E-mail | chemininfo@itwchemin.com |
| Website | www.itwchemin.com |

2. COMPOSITION/INFORMATION ON THE COMPONENTS

No Hazardous components as per OSHA' S HAZARD COMMUNICATION STANDARD 29CFR 1910.1200

| Component Name | CAS# | Concentration | Exposure Limits | R-Phrase |
|--|------------|---------------|--------------------|----------|
| Tri Ethanol Amine | 102-71-6 | 1-4% | ACGIH: TWA 5 mg/m3 | R 36/R38 |
| Light naphthenic, chemically neutralized oil | 64742-52-5 | 50-70% | ACGIH: TWA 5mg/m3 | |
| Amphoteric surfactant blend | 90170-43-7 | 1-5% | | |
| Petroleum sulphonates | 68410-99-1 | 15-20% | | |

3. HAZARD IDENTIFICATION

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|---|---------------------------------|
| Statement of hazardous/dangerous nature | Hazardous. Non dangerous |
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| 4. FIRST AID MEASURES | SYMPTOMS | ACTIONS |
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| Eye contact | May be Mild irritation at the site of contact. | Wash immediately with plenty of soap and water |
| Skin contact | May be Irritation and redness | Bathe the eye with running water for 15 minutes. Consult a doctor |
| Ingestion | May be irritation of throat | Wash out mouth with water |
| Inhalation | May be coughing and sore throat. | Remove causality from exposure ensuring one's own safety whilst doing so. |

5. FIRE FIGHTING MEASURES

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| Extinguishing Media | Use foam, dry chemical or carbon dioxide. |
| Unsuitable Extinguishing Media | Do not use water jet. |
| Special Hazards of Product | This product may give rise to hazardous fumes in a fire. |
| Protective Equipment for Fire-Fighting | Wear self-contained breathing apparatus. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Material can create slippery conditions underfoot. |
| Environmental Precautions | Try to prevent the material from entering drains or rivers. |
| Spillages | Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water. |

7. HANDLING AND STORAGE

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| Handling | Use only at the dilution specified. See label or technical data sheet. |
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| Storage | Storage temperature should be controlled to between 5 and 40 °C. |
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Engineering Control Measures | Exposure to this material may be controlled in a number of ways. The measures appropriate for a particular worksite depend on how the material is used and on the potential for exposure. Use of the basic principles of Industrial Hygiene will enable this material to be used safely. |
| Respiratory Protection | Respiratory protection not normally required. |
| Hand Protection | Concentrated product - PVC or rubber gloves. Diluted product - Use a good quality barrier cream. |
| Eye Protection | Chemical resistant goggles if there is a risk of eye contact. |
| Body Protection | Normal work wear. |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Physical State | Liquid. |
| Color | Blue. |
| Odor | Faint ammonia odor . |
| pH | 9.0 – 10.0 at 5.0 % volume in water. (Typical) |
| Boiling Range/Point (°C) | Boils above 100. |
| Flash Point (PMCC) (°C) | Exceed 100. |
| Solubility in Water | Miscible. |
| Density | 0.91 (measured as kg/liter) |
| Auto-flammability (°C) | Above 200. |
| Viscosity (CSt) | Mobile liquid at ambient temperatures. (45+/- 3.0 CST @37.8C) |

The above mentioned values are typical ,can't be inferred as product specifications

10. STABILITY AND REACTIVITY

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| Stability | Stable under normal conditions. |
| Conditions to Avoid | High temperatures. |
| Materials to Avoid | Strong oxidizing agents. Strong acids. |
| Hazardous Decomposition Products | After evaporation of water, combustion will generate: oxides of nitrogen. ammonia. smoke, possibly thick and choking, resulting in zero visibility. |

11. TOXICOLOGICAL INFORMATION

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| Routes of exposure | Refer to section 4 of MSDS for routes of exposure and corresponding symptoms |
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12. ECOLOGICAL INFORMATION

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| Mobility | The product will leach into soil. The product is non- volatile and water-soluble and will partition to the aqueous phase. |
| Persistence/Degradability | The product is expected to be partially or slowly biodegradable. |

13. DISPOSAL

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| Product Disposal | Incineration. Dispose of in accordance with all applicable local and national regulations. |
| Container Disposal | Labels should not be removed from containers until they have been cleaned. Dispose of containers with care. Do not incinerate closed containers. |

14. TRANSPORT INFORMATION

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| ADR/RID | Not dangerous |
| IMDG/ IMO | Not dangerous |
| IATA/ICAO | Not dangerous |

15. REGULATORY INFORMATION

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| Hazard Symbols | |
| Risk phrases used in s.2 | R36: irritating to eyes R38: irritating to skin |
| Safety phrases | None |
| Note | The regulatory information given above only indicates the principle regulations specifically applicable to the product described in the safety data sheet. The users attention is drawn to the possible existence of additional provisions, which complete these regulations. Refer to all applicable national and local regulations or provisions. |

16. OTHER INFORMATION

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|---------------------------------|--|
| Other information | Metal Working Fluid |
| HMIS RATING | Health: 1 Reactivity: 1 Flammability: 1 |
| Risk phrases used in s.2 | R36: irritating to eyes R38: irritating to skin |
| Legal disclaimer | The above information is believed to be correct but does not purport to be all-inclusive and shall be only used as guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. |

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