MATERIAL SAFETY DATA SHEET

PRODUCT NAME: WATERBASE-INK SERIES 1000
PRODUCT CODE: WB 1000

HMIS CODES: H F R P

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: T.W.GRAPHICS GROUP
ADDRESS: 7220 East Slauson Avenue, City of Commerce, CA 90040
EMERGENCY PHONE: 1-800-424-9300 INFORMATION PHONE: (213) 721-1400
DATE REVISED: 05-04-92
REASON REVISED: Updated.

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>MFR TLV</th>
<th>VAPOR PRESSURE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene Glycol</td>
<td>107-41-5</td>
<td>25 ppm</td>
<td>25 ppm</td>
<td></td>
<td>0.1</td>
<td>60F</td>
</tr>
<tr>
<td>Diethylethanolamine</td>
<td>238-87-1</td>
<td>3 ppm</td>
<td>N/A</td>
<td></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Ethylene Glycol Mono butyl Ether</td>
<td>111-76-2</td>
<td>25 ppm</td>
<td>25 ppm</td>
<td></td>
<td>0.6</td>
<td>60F</td>
</tr>
<tr>
<td>Glycol Ether</td>
<td>20 ppm</td>
<td>20 ppm</td>
<td>20 ppm</td>
<td></td>
<td>0.1</td>
<td>60F</td>
</tr>
<tr>
<td>Diethylene Glycol n-Buty Ether</td>
<td>000112-345</td>
<td>NE</td>
<td>NE</td>
<td>35 ppm</td>
<td>0.1</td>
<td>77F</td>
</tr>
</tbody>
</table>

*** No toxic chemical(s) subject to the reporting requirements of Section 313 of Title 111 and of 40 CFR 372 are present. ***

TLV (threshold limit value) refer to product as such and do not indicate the value of the finished ink which represents a smaller percentage than the one considered irritating.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: > 212 Deg F
VAPOR DENSITY: HEAVIER THAN AIR
SOLUBILITY IN WATER: Soluble
APPEARANCE AND ODOR: Milky or colored liquid with mild odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 0.9% UPPER: 24.6%

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

Wear self-contained breathing apparatus to protect against hazardous effects of normal combustion or oxygen deficiency.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Will not support combustion unless the water has evaporated.
STABILITY: STABLE
CONDITIONS TO AVOID

None

INCOMPATIBILITY (MATERIALS TO AVOID)

None

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
Normal combustion products as carbon monoxide, carbon dioxide, or oxides of nitrogen.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
None currently known.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
None currently known.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
None currently known.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
If ingested, may result in vomiting, nausea.

HEALTH HAZARDS (ACUTE AND CHRONIC)
None currently known.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
Pre-existing nasal, eye, skin, and respiratory irritations may be aggravated by overexposure.

EMERGENCY AND FIRST AID PROCEDURES
EYE CONTACT: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. If irritation persists, see a physician. SKIN CONTACT: Wash skin thoroughly with soap and water. If irritation persists, see a physician. INHALATION: If there are acute or chronic symptoms, move person to fresh air, give artificial respiration, and call a physician.
SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Eliminate open flames or ignition in the vicinity of spill or released vapor. Stop source of leak. Absorb large spills with absorbent clay or other suitable materials.

WASTE DISPOSAL METHOD
Flocculate liquid wastes and dispose off residues observing local, federal, health, safety, and pollution laws.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Store and use in a well ventilated area. DO NOT USE OR STORE NEAR OPEN FLAME, SPARKS, OR HOT SURFACES. KEEP CONTAINERS TIGHTLY CLOSED.

OTHER PRECAUTIONS
HMIS RATINGS: Health: 1 Reactivity: 0 Flammability: 0 Personal Protection: 8

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION
If exposure does exceed occupational exposure limits, use a NIOSH approved respirator, or an atmosphere-supplying respirator, or an air-purifying respirator for organic vapors.

VENTILATION
Use adequate ventilation to keep airborne concentration below exposure standards.

PROTECTIVE GLOVES
Use Neoprene or Nitrile gloves for direct handling.

EYE PROTECTION
Use a chemical safety goggles if needed.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Eyewash fountain, safety showers are recommended.

WORK/HYGIENIC PRACTICES
After use, thoroughly wash hands with soap and water before eating, drinking, or smoking.

SECTION IX - DISCLAIMER

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