MATERIAL SAFETY DATA SHEET

PRODUCT NAME: WATERBASE INK
PRODUCT CODE: WB 5000

HMIS CODES: H F R P

1 0 0 B

-------------- SECTION I - MANUFACTURER IDENTIFICATION --------------

MANUFACTURER'S NAME: T.W. GRAPHICS GROUP
ADDRESS: 7220 EAST SLAUSON AVENUE, CITY OF COMMERCE, CA. 90040
EMERGENCY PHONE: 1-800-424-9200 INFORMATION PHONE: (213) 721-1400
DATE REvised: 02-13-90 NAME OF PREPARER: N.G. David
REASON REVISED: New Formula.

-------------- SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION --------------

HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>OSHA PEI</th>
<th>ACGIH TLV</th>
<th>MFR TLV</th>
<th>VAPOR PRESSURE</th>
<th>TEMP</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Cosolvent</td>
<td></td>
<td>50 ppa</td>
<td>25 ppa</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proprietary Aqueous Solution</td>
<td>67-56-1</td>
<td>25 ppa</td>
<td>200 ppa</td>
<td>200 ppa</td>
<td>96.0</td>
<td>68F</td>
<td>0.19</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td></td>
<td>67-56-1</td>
<td>200 ppa</td>
<td>200 ppa</td>
<td>96.0</td>
<td>68F</td>
<td>0.19</td>
</tr>
</tbody>
</table>

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
* Typical, a sub-component of one of the ingredients.

-------------- SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS --------------

BOILING POINT: 274 to 363 Deg F
SPECIFIC GRAVITY (H2O=1): 1.2
VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN DETERGENT
COATING V.O.C.: 2.15 LB/GL (258 G/L)
MATERIAL V.O.C.: 1.18 LB/GL (142 G/L)
SOLUBILITY IN WATER: Miscible.
APPEARANCE AND ODOR: Milky or colored liquid with mild odor.

-------------- SECTION IV - FIRE AND EXPLOSION HAZARD DATA --------------

FLASH POINT: None
METHOD USED: EPA 1010
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: N/A  UPPER: N/A
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.
SECTION V - REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID
Keep away from heat, sparks, and open flame.

INCOMPATIBILITY (MATERIALS TO AVOID)
Isolate from acidic materials.

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 nausea, vomiting.

HEALTH HAZARDS (ACUTE AND CHRONIC)
None.

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

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
Overexposure may cause eye and skin irritations, headache, nausea.

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, call a physician.
SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Evacuate area 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
Floculate liquid wastes, dispose of residues observing local, state, and federal health, safety and pollution laws.

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

OTHER PRECAUTIONS
Health Maintenance Identification System (HMIS): H/1,F/O,R/O,P/B.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION
Wear approved NIOSH respiratory protective equipment.

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

PROTECTIVE GLOVES
Use waterproof gloves for direct contact.

EYE PROTECTION
Use safety goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Eye wash fountain and safety showers are recommended.

WORK/HYGIENIC PRACTICES
Launder contaminated clothing before use.

SECTION IX - DISCLAIMER

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