MATERIAL SAFETY DATA SHEET

PRODUCT NAME: RETARDER FOR WATERBASE INK
PRODUCT CODE: 1822
HMIS CODES: H F R P

--------- SECTION 1 - 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: (323) 721-1400
DATE REVISED: 07-05-94
NAME OF PREPARER: MARTIN SCHULE

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

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>CAS NUMBER</th>
<th>OCCUPATIONAL EXPOSURE LIMITS</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>0.1</td>
<td>68F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 ppm</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

+++ No toxic chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. ++++

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

BOILING POINT: 388 Deg F
SPECIFIC GRAVITY (H2O+1): 0.9
VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
SOLUBILITY IN WATER: Infinite
APPEARANCE AND ODOR: Colorless, slightly viscous liquid with mild odor.

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

FLASH POINT: 211 Deg F
METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 1.2%  UPPER: 8.1%

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

SPECIAL FIREFIGHTING PROCEDURES
Wear self-contained breathing apparatus and protective clothing to protect against hazardous effects of normal combustion.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Closed containers may explode if exposed to extreme heat. Use water spray to keep fire exposed containers cool.
SECTION V - REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID
Isolate from strong oxidizing agents.

INCOMPATIBILITY (MATERIALS TO AVOID)
Keep away from heat, sparks, and open flame.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
Normal combustion byproducts 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
Vapor concentration (100 ppm) may cause nasal and respiratory irritation.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS
Overexposure may cause slight to moderate skin and eye irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
Absorption may cause moderate skin irritation.

INGESTION HEALTH RISKS AND SYMPTOMS
If ingested, can result in central nervous system depression.

HEALTH HAZARDS (ACUTE AND CHRONIC)
Eye, skin, and respiratory irritation.

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

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
Prolonged exposure may result in dizziness, headache, and nausea.

EMERGENCY AND FIRST AID PROCEDURES
EYE CONTACT: Immediately flush eyes with plenty of 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.
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:
Place contaminated material in disposable containers. Incinerate observing local, state, and federal health, safety, and pollution laws.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Store and use in a well-ventilated area.

DO NOT STORE OR USE NEAR OPEN FLAME, SPARKS, OR HOT SURFACES.
Keep containers tightly closed.

OTHER PRECAUTIONS
HMIS: H/1, F/1, R/0, P/B

SECTION VIII - CONTROL MEASURES
RESPIRATORY PROTECTION
If exposure does or may 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 waterproof gloves for direct contact.

EYE PROTECTION
Use chemical safety goggles for prolonged exposure.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Solvent resistant aprons, eyewash fountains, safety showers are recommended.

WORK/HYGIENIC PRACTICES
After use, wash hands with soap and water before eating, drinking or smoking. Launder contaminated clothing before reuse.

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