MATERIAL SAFETY DATA SHEET
16972 Rhodamine WT 20%

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SECTION I - IDENTIFICATION
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MANUFACTURER/DISTRIBUTOR. CHEMCENTRAL/Dyes & Pigments Division
13395 Huron River Drive
Romulus, Michigan 48174
EMERGENCY PHONE NUMBER... (313) 941-4800
EFFECTIVE DATE......... 04/21/1999
REVISED DATE........... 04/21/1999
CHEMICAL NAME........... Acid Red 388
TRADE NAME............. 16972 Rhodamine WT 20%
CHEMICAL FAMILY........ Xanthene
CHEMICAL FORMULA.... Proprietary

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SECTION II - HAZARDOUS INGREDIENTS
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HAZARDOUS COMPONENTS HAZARDOUS % TLV (Units) PROD. CAS #
Trimellitic Acid 2.6% Not Established 528-44-9
This product supplied is in compliance with TSCA Reporting Requirements,
SARA Title III. Not Listed.

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SECTION III - PHYSICAL DATA
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BOILING POINT(F)........ 100C
FREEZING POINT (F)...... Not evaluated
VOLATILITY/VOL(%)...... N/A
MELTING POINT.......... N/A
VAPOR PRESSURE (mm Hg)... Not evaluated
VAPOR DENSITY (Air=1).... N/A
SOLUBILITY IN H20....... Soluble
APPEARANCE/ODOR........ Dark red liquid, no odor
SPECIFIC GRAVITY (H2O=1). 1.13
EVAPORATION RATE....... N/A
PH..................... 10.5-10.8

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SECTION IV FIRE & EXPLOSION HAZARD DATA
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FLASH POINT.............. N/A
LOWER FLAME LIMIT........ N/A
HIGHER FLAME LIMIT....... N/A
EXTINGUISH MEDIA........ Water fog, CO2, or Dry chemical.
FOR FIRE ................ Fire fighters should be equipped with self contained breathing apparatus and turnout gear.

UNUSUAL FIRE HAZARD...... Adequate ventilation and clean up must be maintained to minimize fume accumulation.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value... Not established
Over Exposure Effects.... Contact with eyes may result in severe irritation. Contact with skin may result in irritation. Ingestion may result in gastric disturbances. Inhalation of fumes may irritate respiratory tract. Intracelar Rhodamine WT Liquid was tested in a battery of in vitro and in vivo mammalian assays resulting in negligible or low levels of genotoxic activity even at very high concentrations. No evidence of in vivo genetic activity was observed either in terms of bone marrow micronuclei or sperm abnormalities. (G.R. Douglas ET AL, "Comparative mammalian in vitro and in vivo studies on the mutagenic activity of Rhodamine WT", Mutation Research, 118, 1983, 117-125)

Intracellular Rhodamine WT was positive in a Salmonella/Mammalian Microsome assay (Nestmann and Kowbel, 1979). G. Douglas as referenced, stated that impurities in the dye may have caused the mutagenic effects seen or alternatively the dye may be a total altogether from his study, "...Rhodamine WT appears not to represent a major genotoxic hazard."

First Aid Procedures..... Flush eyes with flowing water at least 15 minutes. If irritation develops, consult a physician. Wash affected skin areas thoroughly with soap and water. If irritation develops, consult a physician. Remove and launder contaminated clothing before reuse. If swallowed, dilute with water and induce vomiting. Get immediate medical attention. If inhaled, move to fresh air. Aid in breathing, if necessary, and get medical attention. **NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAS CONVulsIONS.**

SECTION VI - REACTIVITY DATA

Chemical Stability..... Stable
Conditions to Avoid...... N/A
Incompatible Materials... Unknown
Decomposition Products... Carbon monoxide, Carbon dioxide, and oxides of Nitrogen

Hazardous Polymerization. Does not occur
Polymerization Avoid...... N/A
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SECTION VII - SPILL OR LEAK PROCEDURE
FOR SPILL ................ Spills should be contained and placed in suitable containers.
WASTE DISPOSAL METHOD .... Do not discharge into sewers or waterways. Dispose of in accordance with local regulations.

SECTION VIII - SPECIAL PROTECTION
RESPIRATORY PROTECTION ...... NIOSH/OSHA approved respirator as necessary.
VENTILATION .............. Local exhaust to control fumes.
PROTECTIVE GLOVES ......... To prevent skin contact.
EYE PROTECTION ........... Goggles.
PROTECTIVE EQUIPMENT ....... Eye wash fountains should be easily accessible.
HANDLING AND STORAGE .... Keep away from excessive heat and moisture. Keep containers closed.

SECTION IX - SPECIAL PRECAUTIONS
HAZARD CLASS ............ N/A
DOT SHIPPING NAME ........ Ink Material
NMFC Item #101720
REPORTABLE QUANTITY (RQ) .. N/A
UN NUMBER .................. N/A
NA # ......................... N/A
DOT LABELS REQUIRED ...... Mfg. Label Only
SPECIAL SHIPPING INSTRUCTIONS:
PROTECT FROM FREEZING
PACKAGING SIZE ............ Various

FOOT NOTES
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N/A = Not Applicable

FEDERAL RIGHT TO KNOW LAWS
Non-Hazardous Ingredients:
Dye Compound, Proprietary: NJ, PA
Water, CA: # 7732-18-5: NJ, PA
Sodium Chloride, CAS # 7647-14-5: NJ, PA