MATERIAL SAFETY DATA SHEET

DUPLICATING FLUID

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME........ STARKER CHEMICAL PROCESS COMPANY
9600 W OGDEN AVE
LAGRANGE, IL 60525
1-800-323-3040

EMERGENCY PHONE NUMBER.... 24 HOUR INFOTRAC 1-800-535-5053

RESELLER'S NAME............. n/a

EFFECTIVE DATE................ 12/22/93

REVISED DATE................. DC1

PRODUCT IDENTIFIER........... HEYER DUPLICATING FLUID

TRADE NAME.................... ALCOHOL

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS | HAZARDOUS | TLV (Units) | HAZARDOUS | CAS/NA/UN | PERCENT | INGREDIENT | NUMBERS |
------------------------|-----------|------------|-----------|-----------|---------|------------|---------|
METHANOL*               | 99 %      | 200 ppm    | 67-56-1   |

SPECIAL... *This chemical is subject to S.A.R.A. Title III section 313 part 372 reporting. VOC 95% 6.36#/GAL

SECTION III - PHYSICAL DATA

BOILING POINT............. 147°F
FREEZING POINT............ n/a
VOLATILITY/VOL(%)......... 100%
MELTING POINT............. liquid
VAPOUR PRESSURE........... 96 mm hg @ 68°F
VAPOUR DENSITY (air=1).... 1.11
SOLUBILITY IN H2O......... complete
ODOUR AND APPEARANCE...... Clear-colorless liquid; Characteristic alcohol odor
SPECIFIC GRAVITY.......... .802
EVAPORATION RATE.......... 2.0
pH........................... n/a

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATION........ 54°F Tag Closed Cup
LOWER EXPLOSION LIMIT(% BY VOL)................. 6.0
UPPER EXPLOSION LIMIT(% BY VOL).................. 36.0
MEANS OF EXTINCTION........ CO2, DRY CHEMICAL, ACOHOL-TYPE FOAM. DO NOT USE WATER STREAMS. THEY MAY SPLASH AND SPREAD FIRE.
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FOR FIRE................. Mixture introduces the potential of a Class 1B flammable liquid fire hazard. CO₂ or dry chemical extinguishers would provide a blanketing. Water fog may be used. Firefighters should wear a self-contained breathing apparatus.

EXPLOSION DATA........... Vapors are toxic. Vapors mixed with air within flammability concentration limits (6-36% by volume) are explosively ignited by any spark source. May burn with invisible flame.

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY
SKIN CONTACT SKIN ABSORPTION EYE INHALATION INGESTION
yes yes yes yes yes

ACUTE AND CHRONIC OVER EXPOSURE EFFECTS........... POISONOUS! Can affect body thru inhalation or skin. Ingestion can produce blindness. May prove fatal in amounts as small as 1-4 ounces. Prompt medical attention is essential.

CARCINOGENICITY, REPRODUCTIVE EFFECTS.... n/a
SYMPTOMS.................. INHALATION: coughing, shortness of breath, dizziness, intoxication. EYES: moderate irritation, burning sensation, tearing, redness. SKIN: irritation, redness. INGESTION: dizziness, headache, nausea, vomiting.

SENSITIZATION TO MATERIAL Vapors may aggravate conditions such as emphysema and bronchitis.

SPECIFIC FIRST AID PROCEDURES........... IN CASE OF DISCOMFORT BY VAPORS, MOVE TO A VENTILATED AREA. IF BREATHING HAS STOPPED, ADMINISTER ARTIFICIAL RESPIRATION. GIVE OXYGEN. KEEP WARM AND CALL A PHYSICIAN. REMOVE PROMPTLY CONTAMINATED CLOTHES. WASH SKIN WITH SOAP AND WATER. IF INGESTED, GIVE PLENTY OF WATER. INDUCE VOMITING IF POSSIBLE. CALL A PHYSICIAN. IF AVAILABLE, ADMINISTER 1 TABLESPOON (1/2 OUNCE) IPECA CA. SYRUP WITH AT LEAST 1 CUP OF WATER FOR PERSONS ONE (1) YEAR OF AGE OR OLDER. FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. SPREAD EYELIDS WHILE FLUSHING.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY....... stable
CONDITIONS OF REACTIVITY. heat, sparks, open flames, oxidizers
INCOMPATIBLE MATERIALS... Reacts vigorously with strong oxidizing, chromic anhydrides, lead perchlorates, and perchloric acids.

HAZARDOUS DECOMPOSITION PRODUCTS........... Incomplete combustion will generate carbon monoxide/carbon dioxide.
HAZARDOUS POLYMERIZATION. will not occur
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POLYMERIZATION AVOID... n/a

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES

Eliminate all sources of ignition. Contain leak. Small leaks can be soaked up with absorbent material. Large leaks should be stopped at source and diluted with water. Leaking containers should be removed to outdoors or isolated, well-ventilated area.

WASTE DISPOSAL

Facilities must be provided to control, collect and hold accidental spills for approved disposal and recovery. Do not allow to enter streams or sewers. Dispose of in accordance with all local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION

For large quantities, use NIOSH/MSHA approved supplied air/self contained breathing apparatus.

VENTILATION

Adequate ventilation must be provided to maintain concentrations below 200 ppm.

PROTECTIVE GLOVES

Use splash goggles or face shields. Contact lenses should not be worn.

EYE PROTECTION

Safety showers and eye wash stations should be readily available.

OTHER PROTECTIVE EQUIPMENT

Keep away from heat or ignition sources including smoking materials. Use with adequate ventilation.

HANDLING PROCEDURES AND EQUIPMENT

Keep container properly closed. Container is hazardous when empty. Make sure container is properly labeled.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS... 3 (Flammable Liquid)

DOT SHIPPING NAME... METHANOL SOLUTION

UN NUMBER... 1230

NA #... n/a

HMIS HEALTH

3

HMIS FLAMMABILITY

3

HMIS REACTIVITY

0

HMIS PERSONAL PROTECTION

B

OTHER

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