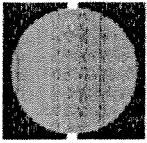


Material Safety Data Sheet



HAVILAND

Glycerine 99.5%

SECTION I - IDENTIFICATION

MANUFACTURER'S NAME Haviland Products Company
MANUFACTURER'S ADDRESS 421 Ann St., N.W., Grand Rapids, MI 49504
PHONE NUMBER (616) 361-6691
EMERGENCY PHONE NUMBER CHEMTREC (800) 424-9300
EFFECTIVE DATE 7/1/03
TRADE NAME **Glycerine 99.5%**
CHEMICAL FAMILY Miscellaneous Blend

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Glycerine, minimum	Not Established	Not Established	56-81-5

SECTION III - PHYSICAL DATA

BOILING POINT 554°F (290°C)
FREEZING POINT No Information Available
VAPOUR PRESSURE < 1.0 mmHg @ 20°C
VAPOUR DENSITY (air=1) 3.0
SOLUBILITY IN H₂O Miscible
ODOUR AND APPEARANCE Water White Liquid; Odorless
SPECIFIC GRAVITY 1.2607 @ 25/25 (Min.)
pH Not Established

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATION 390°F (199°C), PMCC
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION Water fog, alcohol foam, CO₂, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES None Currently Known
UNUSUAL FIRE HAZARD None Currently Known

Material Safety Data Sheet

SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP? No
IARC MONOGRAPHS? No
OVER EXPOSURE EFFECTS Irritation to skin and eyes.
PRIMARY ROUTE(S) OF ENTRY Eye Contact
SPECIFIC FIRST AID PROCEDURES In case of contact: Immediately wash skin and eyes with plenty of water.
If inhaled: Remove to fresh air. Contact physician. If swallowed: Induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS None Currently Known

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY Stable
CONDITIONS TO AVOID Strong Oxidizing Agents
INCOMPATIBLE MATERIALS Oxidizing Material
HAZARDOUS DECOMPOSITION PRODUCTS Acrolein
HAZARDOUS POLYMERIZATION Will Not Occur
POLYMERIZATION AVOID Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES Contain spill. Cover with absorbent material, soak up and sweep into dry, labeled drum.
WASTE DISPOSAL Reprocess or incinerate in accordance with all federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION None required for normal use.
VENTILATION To maintain mists below limits.
PROTECTIVE GLOVES Rubber or other impervious materials.
EYE PROTECTION Chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.
HANDLING PROCEDURES AND EQUIPMENT Close container tightly before moving. Emptied containers retain products residue.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS None
DOT SHIPPING NAME None
UN NUMBER NR
REPORTABLE QUANTITY (RQ) Not Listed

REFERENCES

GLYC995