

Material Safety Data Sheet



LIQUID FILTER CLEANER

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 4/13/94
TRADE NAME **LIQUID FILTER CLEANER**
CHEMICAL FAMILY Mineral Acid

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
**Phosphoric Acid (40% by wt)	1 mg/m ³ TWA	1 mg/m ³ TWA	7664-38-2
Citric Acid	Not Established	Not Established	77-92-9
Surfactants	Not Established	Not Established	Proprietary
SEE NOTE UNDER "REFERENCES" AT END OF MSDS	OSHAPEL	TLV	PCASNUM

SECTION III - PHYSICAL DATA

BOILING POINT Not Determined
FREEZING POINT Does not freeze; becomes viscous.
VAPOUR PRESSURE Not Determined
VAPOUR DENSITY (air=1) Not Determined
SOLUBILITY IN H₂O Completely
ODOUR AND APPEARANCE Clear, Colorless Liquid; Detergent Odor
SPECIFIC GRAVITY 1.18
pH Not Established

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATION Will Not Burn
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION As for Surrounding Fire.
SPECIAL FIRE FIGHTING PROCEDURES Wear self contained breathing apparatus. If heated to decomposition, product emits toxic phosphorus pentoxide fumes.
UNUSUAL FIRE HAZARD Phosphoric acid will not burn but can react with metals to liberate hydrogen gas that can form flammable or explosive mixtures with air.

Material Safety Data Sheet

SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP? No
IARC MONOGRAPHS? No
OVER EXPOSURE EFFECTS Irritation, slightly toxic when inhaled or ingested. Causes redness and burns to exposed tissues.
PRIMARY ROUTE(S) OF ENTRY Inhalation
SPECIFIC FIRST AID PROCEDURES In case of contact: Immediately flush eyes and skin with plenty of water for at least 15 minutes. For eyes get medical attention. If inhaled: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention. Ingestion: Do not induce vomiting. If conscious, give large quantities of water to dilute. Call a Physician Immediately.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS None Currently Known

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY Stable
CONDITIONS TO AVOID Not Applicable
INCOMPATIBLE MATERIALS Alkalies, many metals.
HAZARDOUS DECOMPOSITION PRODUCTS Toxic fumes of phosphorus pentoxide.
HAZARDOUS POLYMERIZATION Will Not Occur
POLYMERIZATION AVOID Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES Wear acid vapor respirator and gloves. Soak up small spills with sand, earth, or absorbent. Scoop up and place in clean, dry, marked, lined steel containers. Neutralize with soda ash. Flush away residue with large quantities of water applied to entire spill area.
WASTE DISPOSAL Dispose of spilled or waste material, contaminated soil and other contaminated material in licensed landfill or treatment facility in accordance with all federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION Supplied air or self contained breathing apparatus with full facepiece.
VENTILATION To maintain vapors below limits.
PROTECTIVE GLOVES Rubber or other impervious material.
EYE PROTECTION Splash proof chemical goggles.
OTHER PROTECTIVE EQUIPMENT For operations where spills or splashing may occur, use an impervious body covering and boots. A safety shower and eye bath should be available.
HANDLING PROCEDURES AND EQUIPMENT Store away from heat and strong alkalies. Wear protective equipment during handling. Keep container closed when not in use. Never use pressure to empty. Do not store near organic or other readily oxidizable materials.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS Corrosive, 8, PG III
DOT SHIPPING NAME CORROSIVE LIQUID, N.O.S. (Containing Phosphoric Acid)
UN NUMBER UN1760
REPORTABLE QUANTITY (RQ) 6,666lbs.

Material Safety Data Sheet

REFERENCES

LIQBCBRD ****NOTE**** Hazardous
Component(s) subject to reporting under 40
CFR 372 (SARA Title III, Sec. 313).