

SECTION I - IDENTITY

#111 LAVATROL Hazardous - YES

PERMA Incorporated  
605 Springs Road  
Bedford, MA. 01730

Health	2
Flammability	0
Reactivity	1
Personal Protection	C

Telephone Number for Information (978)667-5161  
Date Prepared 02/22/96  
Prepared By T. Pitrolffy

4 = Most Hazardous  
Emergency Phone Number 1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL mg/m3	TWA mg/m3	STEL mg/m3	Other Limits mg/m3 CEILING	% (opt)
*SULFURIC ACID #7664-93-9	1	1	3		< 5
*HYDROGEN CHLORIDE #7647-01-0	N.A.	N.A.	N.A.	7	< 20
OXALIC ACID # 144-62-7	1	1	2		< 3

\*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 210F	Specific Gravity(Water=1)	- 1.04
Vapor Pressure (mm Hg)	- 18.5	Melting Point	- N.A.
Vapor Density (air=1)	- 1.1	Evaporation Rate(Butyl Acetate=1)	-0.2
Viscosity (CPS)	- 5	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA.	Solubility in Water	-COMPLETE
pH - 1-3 +/-			
Appearance and Odor	-BLUE MILKY LIQUID WITH FRAGRANCE		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - N.A. Flammable Limits  
LEL - N.A. UEL - N.A.

Extinguishing media - WATER

Fire Fighting Procedure - COOL CONTAINERS WITH WATER

Fire and Explosion Hazards - NON FLAMMABLE, BUT MAY REACT WITH MOST METALS ON LONG CONTACT, WITH THE POSSIBLE EVOLUTION OF HYDROGEN

SECTION V - REACTIVITY DATA

Stability - STABLE  
Conditions to Avoid - N.A.

Incompatibility - ALKALINE, CHLORINE AND CELLULOSE BASED MATERIALS  
Hazardous Decomposition or Byproduct - HYDROGEN CHLORIDE GAS

Hazardous Polymerization - WILL NOT OCCUR  
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.  
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:  
Inhalation - YES Skin - YES Ingestion - YES  
Health Hazards-Acute: CAUSES SEVERE CHEMICAL BURNS TO EYES, SKIN AND MUCOUS MEMBRANES. CHRONIC: CHEMICAL BURNS AND/OR ULCERATION OF SKIN, MAY PERMANENTLY DAMAGE EYES. TARGET ORGANS: EYES, RESP. SYS., UPPER GI. TRACT, SKIN  
Carcinogenicity: NO  
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - NO  
Signs and Symptoms of Exposure - REDNESS, IRRITATION OF EYES, SKIN OR MUCOUS MEMBRANES

Medical Conditions Aggravated - SENSITIZED SKIN

Emergency and First Aid Procedures - IMMEDIATELY WASH CONTACT AREAS (EYES) WITH LARGE QUANTITIES OF WATER FOR 15 MINUTES.  
INGESTION: DRINK LARGE AMOUNTS OF WATER OR MILK, CALL PHYSICIAN.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO PLASTIC CONTAINER. WATER RINSE AND DRAIN, FLUSH SMALL AMOUNTS.NEUTRALIZE WITH SODA, ASH OR LIME. (BIODEGRADABLE)  
Waste Disposal Method - DISPOSE OF ACCORDING TO LOCAL, STATE AND FEDERAL HAZARDOUS WASTE REGULATIONS; USE SANITARY LANDFILL.  
EPA WASTE NO. D002

Precautions to be Taken in Handling and Storage -  
USE ADEQUATE VENTILATION. DO NOT MIX WITH OTHER CHEMICALS.  
AVOID PROLONGED CONTACT. KEEP FROM FREEZING AND EXCESSIVE HEAT

Other Precautions - STORE IN SECURE AREA. AVOID FOOD OR FEED CONTAMINATION.  
RINSE EMPTY CONTAINERS BEFORE DISPOSAL. KEEP OUT OF REACH OF CHILDREN !

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE IN WELL VENTILATED AREA, FOLLOW DIRECTIONS, AVOID INHALING MIST.

Ventilation Local Exhaust - RECOMMENDED  
Mechanical - N.A.  
Special - N.A.  
Other - ASSURE FRESH AIR CIRCULATION.

Protective Gloves - REQUIRED: RUBBER, PLASTIC  
Eye Protection - REQUIRED: SAFETY GLASSES, GOGGLES  
Other Protection - RECOMMENDED: RUBBER OR PLASTIC APRON, EYE WASH

Work/Hygienic Practices - DO NOT EAT, DRINK OR SMOKE NEXT TO MATERIAL.  
WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION

49 CFR

Unit Cont. - 55,30,5,1 GAL.,1 QT PLASTIC Report Qty. (Lbs) - NA  
OSHA - IRRITANT Labels - CORROSIVE  
DOT - HAZARDOUS /X/ CORROSIVE LIQUID, PACKAGING GROUP II  
UN - HAZARDOUS /X/ CORROSIVE LIQUID, PACKAGING GROUP II  
DOT:Compounds, cleaning liquid(Contains Hydrochloric Acid, Phosphoric Acid) 8, NA1760, PG II UN:Corrosive liquid,acidic, inorganic, n.o.s. (Contains Hydrochloric Acid) 8, UN3264, PG II (1 qt=limited quantity 49 CFR 173.154)

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.