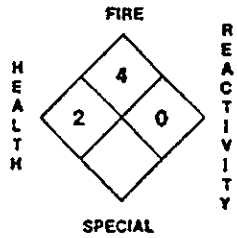
OM0246

HILLSBORO ELEMENTARY SCHOOLS — MATERIAL SAFETY DATA SHEET — CM-0088

215 S.E. 6th Ave.
HILLSBORO, OR 97123

Product Name: PVC PIPE PRIMER
Manufacturing Facility, Company, or Subsidiary: Several Facilities
Address: 1001 Grove Street, Middletown, Ohio 45044
Phone (during normal business hours): 513/425-2178
Date of Preparation: 7/1/89 WHL

NFPA 704 RATING



SECTION I — COMPONENT DATA:

Chemical Components	C.A.S. Number	% Wt.
Tetrahydrofuran (THF)	109-99-9	Major
Methyl Ethyl Ketone (MEK)	78-93-3	Minor
Cyclohexanone	108-94-1	Very Minor

SECTION II — PHYSICAL DATA:

Boiling Point (°F): 151°F, based on THF
Vapor Density (Air = 1): 2.5
Specific Gravity (H_2O = 1): 0.910
Evaporative Rate (Butyl Acetate = 1): 8
Vapor Pressure (mmHg @ 20° C): 143 mm
Solubility in Water: 100%
Percent Volatile By Volume: 100%
pH Information: N/A

Appearance and Odor: Low viscosity liquid, MEK-like odor

SECTION III — FIRE & EXPLOSION HAZARD DATA:

Flash Point(°F): 6°F, based on THF
Flammability Limits (%/Vol): **LEL:** 2.0%
Auto-Ignition Temperature (°F): Unknown
Method Used: TCC
UEL: 11.8%
Extinguishing Media: Chemical foam, CO_2, dry chemical

Special Fire-Fighting Instructions: Wear self-contained breathing apparatus when fighting fire in confined spaces.

Unusual Fire and Explosion Hazards: Vapor may travel along ground to an ignition source.

SECTION IV — REACTIVITY DATA:

Stability (conditions to avoid): Stable. Avoid sources of ignition.

Incompatibility (materials to avoid): Strong oxidizers, such as chlorine, permanganate and dichromate.

Hazardous Decomposition Products: CO, CO_2, and unknown hydrocarbons.

Hazardous Polymerization: Will not occur.

SECTION V — HEALTH HAZARD DATA:

Primary Route(s) of Entry: Inhalation, skin contact, eye contact.

Effects of Exposure: Note: To Contech's knowledge, this mixture has not been tested as a whole to determine whether the mixture is a health hazard. The information provided as follows under **Inhalation, Skin Contact, Eye Contact, and Ingestion** represents the health hazards of the individual chemical components. The following effects of exposure would be expected to be possibly caused by the actual mixture: dizziness, headaches, and nausea from vapor; skin and eye irritation and redness from the liquid.

Inhalation:

MEK vapor may cause irritation of the eyes, nose, throat and mucous membranes. May cause headaches, dizziness, nausea, numbness in fingers, arms, and legs; vomiting; and unconsciousness. Long-term overexposure symptoms may include certain nervous disorders characterized by weakness, fatigue, heaviness in chest and numbness of hands and feet. These symptoms may develop after one year of exposure to vapor concentrations of 50-200 ppm.

Tetrahydrofuran vapor may cause irritation of the eyes and upper respiratory tract; headache; nausea, dizziness; and other signs of central nervous system depression.

Cyclohexanone vapor may cause irritation of eyes, nose, and throat; drowsiness; and narcosis at high concentration. These symptoms become noticeable at concentrations above 50 ppm.

Skin Contact:

Contact with MEK liquid or MEK vapors at concentrations of 300-600 ppm may cause dryness, dermatitis, and severe irritation. Liquid is readily absorbed and may cause numbing of fingers and arms. Contact with tetrahydrofuran liquid may cause irritation and dryness. Contact with cyclohexanone liquid may cause irritation and dermatitis.

Eye Contact:
MEK vapor may cause irritation at 200 ppm. MEK liquid may cause redness and irritation. Tetrahydrofuran liquid may cause irritation. Cyclohexanone liquid may cause irritation and corneal injury.

Ingestion:
MEK vapor may cause irritation of the mouth, throat, and stomach, the severity of which will be dependent upon the amount swallowed. Symptoms of poisoning may include nausea, vomiting, stomach pain and diarrhea. Death can occur from ingestion of as little as 1 ounce.

No effects reported from tetrahydrofuran. For cyclohexanone, the minimum lethal dose for rabbits by oral administration was between 1.6 and 1.9 gm/kg of body weight.

Medical Conditions Known to be Aggravated by Exposure to this Material:
Persons with lung disorders or diseases or skin disorders may be at an added risk as a result of overexposure to this material.

Exposure Limits:

Chemical Components	OSHA PEL (mg/m^3)	ACGIH TLV (mg/m^3)	NTP Listed	IARC Listed
Tetrahydrofuran	590-TWA, 735-STEL	590-TWA, 735-STEL	No	No
Methyl Ethyl Ketone*	590-TWA, 885-STEL	590-TWA, 885-STEL	No	No
Cyclohexanone	100-TWA	(Skin) 100-TWA	No	No

*On Toxic Chemical list (Section 313 SARA)

SECTION VI — EMERGENCY & FIRST-AID PROCEDURES:

Inhalation: In case of overexposure, immediately move person from contaminated area to fresh air. Give artificial respiration if breathing has stopped, or oxygen, if necessary. Seek medical attention, if necessary.
Skin: If irritation develops, remove contaminated clothing immediately, and wash contaminated skin with soap or mild detergent and water for five minutes. If irritation persists, seek medical attention.
Eyes: In case of contact, immediately wash eyes with large amounts of water for fifteen minutes, occasionally lifting the lower and upper lids. Seek medical attention, if necessary.
Ingestion: Seek medical attention, if necessary.

SECTION VII — SPECIAL HANDLING INFORMATION:

Ventilation: Ventilation, as described in the ***Industrial Ventilation Manual*** produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other local, state, and federal regulations.
Respiratory Protection: A properly fitted, NIOSH-approved, respirator with organic vapor chemical cartridge should be worn whenever airborne concentrations exceed the threshold limit value (TLV) or other recommended limits, in accordance with the OSHA Respiratory Protection Standard (29 CFR 1910.134).
Protective Clothing: Impervious protective clothing, such as rubber gloves, apron, and boots, should be worn if direct contact is likely.
Eye Protection: Chemical-type goggles should be worn whenever splashing, spraying, or other eye contact is likely.

SECTION VIII — SPILL, LEAK & DISPOSAL PROCEDURES:

Action to Take for Spills (use appropriate safety equipment): Eliminate ignition sources, flames, pilot lights, and electrical sparks. Provide ventilation. Prevent liquid from entering sewers, waterways, or low areas. Contain spilled liquid with vermiculite, sand, earth, or any other absorbent. Scoop up and store in a suitable container.
Waste Disposal Method: Dispose in accordance with the Resource Conservation and Recovery Act (RCRA), state and local regulations.

SECTION IX — SPECIAL PRECAUTIONS/ADDITIONAL INFORMATION:

Precautions to be Taken in Handling and Storage: All handling equipment should be electrically grounded. Store in cool area away from ignition source.
DOT Information:
Hazardous Material Proper Shipping Name: Flammable Liquid, N.O.S.
Hazard Class: Flammable Liquid
Identification Number: UN 1193
EPA Hazardous Waste Number: N/A

Additional Information: None

While the information and recommendations set forth on this data sheet are believed to be accurate as of the present date, Contech makes no warranty with respect thereto and disclaims all liability from reliance thereon.