

MATERIAL SAFETY DATA SHEET

PILGRIM PERMOCOAT, INC.
402 S. 22ND ST.
TAMPA, FLORIDA 33605

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REVISED-NA

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME -LF 4000, B COMPONENT
CHEMICAL NAME - CYCLOALIPHATIC AMINE BLEND
FORMULA -TRADE SECRET

CAS# - MIXTURE
DOT CLASS -NOT REGULATED
HMIS: H-2, F-1, R-0
MOLECULAR WEIGHT - NA

EMERGENCY CONTACT - ROBERT FORLONG

DAY PHONE - 813-248-3328
NIGHT PHONE - 813-685-5282

EMERGENCY OVERVIEW

HMIS HEALTH RATING 2 FLAMMABILITY 1 REACTIVITY 0
PHYSICAL FORM Mobile Liquid
COLOR AMBER
ODOR Amoniacal like odor
HEALTH HAZARDS Severe eye irritant; moderate skin irritant; may cause skin sensitization
EXTINGUISHING MEDIA Ignition will give rise to a Class B fire. In case of fire use: Water Spray, Carbon Dioxide (CO2), Dry Chemical, Alcohol Foam

C.A.S. CHEMICAL NAME Mixture
SYNONYMS None
CHEMICAL FAMILY Cycloaliphatic Amines
EMPIRICAL FORMULA Mixture
INTENDED USE Epoxy Curing Agent

SECTION 2 - INGREDIENTS

| % | CAS Number and Chemical Name |
|-----|------------------------------|
| <45 | 100-51-6BENZYL ALCOHOL |
| <10 | ** |

** The specific chemical identity of this component is considered trade secret information.

OSHA (ACGIH) EXPOSURE LIMITS

| CAS# | TWA | STEL | CEILING |
|------------|-----------|----------|-----------|
| | ppm | ppm | ppm mg/m3 |
| 100-51-6NE | N/E (N/E) | NE (N/E) | N/E (N/E) |

OSHA (ACGIH) EXPOSURE LIMITS

N/E = Not Established

SECTION 3- HEALTH HAZARDS

ROUTES OF EXPOSURE

- Ingestion
- Skin Absorption
- Inhalation

EXPOSURE STANDARDS

No standards established for the product. Maintain air contaminant concentration in the workplace at the lowest feasible level.

HEALTH HAZARDS

Severe eye irritant; Moderate skin irritant; May cause skin sensitization

TARGET ORGANS

Eye; Respiratory system; Skin.

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Contact with eyes causes severe irritation and pain. Inhalation or aerosol, mist or fog may cause harm if inhaled.

SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)

Repeated and/or prolonged exposures may result in: adverse eye effects (such as conjunctivitis or corneal damage).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Eye disease
Skin disorders
Chronic respiratory disease(e.g. Bronchitis, Emphysema)

IRRITATION EFFECTS DATA

Severe irritant to the eyes of a rabbit.

ACUTE TOXICITY EFFECTS DATA

Oral LD50 (rat): 620 mg/kg (estimate) Data available on components only.
Dermal LD50 (rabbit): >1000 mg/kg (estimate) Data available on components only.
Inhalation LC50 (rat): No data

OTHER ACUTE EFFECTS

No data available

CHRONIC/SUBCHRONIC DATA

No delayed, subchronic or chronic test data are known.

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN CONTACT

Remove product and immediately flush area with water for at least 15 minutes. Seek medical advice.

INHALATION

In case of inhalation or suspected inhalation, move the patient at once to fresh air and call a physician. Keep patient absolutely quiet and start oxygen inhalation through suitable equipment.

Prevent aspiration of vomit. Turn victim's head to the side.

INJECTION

If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

| | |
|--|-------------|
| FLASH POINT (closed cup) | 103C (219F) |
| FLASH POINT METHOD | Closed Cup |
| UPPER EXPLOSION LIMIT (UEL) | No Data |
| LOWER EXPLOSION LIMIT (LEL) | No Data |
| AUTOIGNITION TEMPERATURE | No Data |
| FIRE HAZARD CLASSIFICATION (OSHA/NFPA) | |
| COMBUSTIBLE LIQUID CLASS IIIB | |

EXTINGUISHING MEDIA

Ignition will give rise to a class B fire In case of fire use: Water Spray, Carbon Dioxide(CO2), Dry Chemical, Alcohol Foam.

SPECIAL FIRE FIGHTING PROCEDURES

Retain expended liquids from fire fighting for later disposal
Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus. Water spray is also useful in cooling fire-exposed tanks and in dispersing vapors.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products. Sudden reaction and fire may result if product is mixed with an oxidizing agent.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc) Stop the leak if possible. Ventilate the space involved. Shut off or remove all ignition sources. Construct a dike to prevent spreading.

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent (sodium bisulfate) and place in a container or dumpster pending disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing.

OTHER EMERGENCY ADVICE

Avoid contamination of ground and surface waters Notify local health authorities and other appropriate agencies if such contamination should occur. Potential for carbon monoxide and/or nitrous oxides generation in a fire must be recognized.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from oxidizers, heat or flames, keep in cool, dry, ventilated storage and in closed containers.

HANDLING

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well ventilated work space.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible.
Adhere to work practice rules established by government regulations (e.g. OSHA).

SECTION 8 - PERSONAL PROTECTION/EXPOSURE CONTROLS

EYE PROTECTION

Chemical safety glasses. Splash-proof eye goggles.
Contact lenses should not be worn.

HAND PROTECTION

Nitrile rubber gloves. In emergency situations, wear impermeable gloves with cuffs to prevent spread of material to area above the wrists.

RESPIRATORY PROTECTION

Not required under normal conditions. Supplied air respirator with full face shield, self-contained breathing apparatus under the following conditions:

emergency situations,
when product vapor concentration is greater than 20 ppm for a period longer than 20 minutes,
during repair and cleaning of equipment,
during transfer or discharge of the product.

PROTECTIVE CLOTHING

Clean unsoiled clothing. Long sleeved clothing. Rubber apron. Rubber boots.

ENGINEERING CONTROLS

Adequate general and local exhaust. Maintain air concentrations in work spaces in accord with standards outlined in section 2 and 3.

WORK AND HYGIENIC PRACTICES

Wash at the end of each workshift and before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Discard contaminated leather articles.
Examine protective gloves before using. Discard if find evidence of holes or cracks.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------|-----------------|
| PHYSICAL FORM | Mobile liquid |
| COLOR | Amber |
| ODOR | Ammoniacal |
| pH | Alkaline |
| VAPOR PRESSURE | 13 @ 54C (130F) |
| VAPOR DENSITY | No Data |
| BOILING POINT | 222C (432F) |
| MELTING POINT | No data |
| SOLUBILITY IN WATER | Slight |
| SPECIFIC GRAVITY (Water =1) | 1.1 |
| viscosity (CPS) | 500 @ 25C (77F) |
| molecular weight | Mixture |

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable

CONDITIONS TO AVOID (if unstable)

Not applicable

INCOMPATIBILITY (Materials to avoid)

Oxidizing Agents (i.e. perchlorates, nitrates etc.).
A reaction accompanied by large heat release occurs when the product is mixed with acids.

HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Hydrogen Cyanide when heated. Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm).

Combustion of product under oxygen-starved conditions can be expected to produce numerous toxic products including: nitriles, amides, cyanic acid, isocyanates, cyanogens and carbamates.
Irritating and toxic fumes at elevated temperatures.

HAZARDOUS POLYMERIZATION

Will not occur

CONDITIONS TO AVOID (if polymerization may occur)

Not applicable

-----**SECTION 11 - ECOLOGICAL INFORMATION**-----

No Data

SECTION 12 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and local Regulations, Incinerate in admixture with fuel equipped with a scrubber to remove nitrogen oxides, to remove carbon monoxide.

SECTION 13 - TRANSPORT INFORMATION

| | |
|----------------------------|--------------------------------|
| DOT NON-BULK SHIPPING NAME | Resin Compound - Not Regulated |
| DOT BULK SHIPPING NAME - | Resin Compound - Not regulated |
| IMO SHIPPING DATA | Not Regulated |
| ICAO/IATA SHIPPING DATA | Not Regulated |

SECTION 14 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA) -

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)

Irritant

EPA SARA Title III Section 312 (40CFR370) hazard class

Immediate Health Hazard

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimus" level are

None

STATE REGULATIONS

PROPOSITION 65 SUBSTANCES component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986"

None

NEW JERSEY TRADE SECRET REGISTRY NUMBERS

05995500-5422P, 05995500-5426P