

Safety Data Sheet: Permalac 2KB Hardener

Section 1: Identification

Product Name:	Permalac 2KB Hardener
Manufacturer's Name:	Peacock Laboratories
Address	1901 S. 54th Street
City, State, Zip	Philadelphia, PA, 19143
Phone Number	215 729 4400
Emergency Contact	215 729 4400
Chemtrec	800 424 9300

Recommended Use: An exterior grade, non yellowing, clear acrylic lacquer for the protection of metal, wood, and masonry.

Section 2: Hazards Identification

Section 2.1

Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Skin irritation (Category 2), H315

Reproductive toxicity (Category 2), H361

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - repeated exposure (Category 2), H373

Aspiration hazard (Category 1), H304

Acute aquatic toxicity (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 2.2 Label Elements

Hazard Pictograms (GHS-US)



Signal word (GHS-US)

:Danger

Hazard Statements (GHS-US):

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H401 Toxic to aquatic life.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Section2.3 Other Hazards

No additional information

Section3: Composition

INGREDIENT

INGREDIENT	CAS Number	Weight %
Homopolymer of Hexamethylene Diisocyanate	28182-81- 2	15-20%
Hexamethylene-1,6- Diisocyanate:	822-06-0	<.05%
Xylene	1330-20-7	55-65%
Toluene:	108-88-3	18-25%

Section 4: First Aid Measures

Inhalation: Remove to fresh air, restore breathing. Consult a physician.

Skin Contact: Flush with water then wash skin thoroughly with soap and water while removing contaminated clothing. Consult a physician.

Eye Contact: Remove contact lenses flush immediately with large amounts of water for at least 15 minutes. Consult a physician.

Ingestion: DO NOT INDUCE VOMITING. Get medical attention immediately If vomiting occurs, keep head below hips to prevent aspiration into lungs.

Section 5: Fire Fighting Procedures

Flammable liquid and vapor. Vapors may migrate to ignition source and cause flash fire. Isolate from heat, sparks, electrical equipment, appliances, pilot lights, flames and other sources of ignition.

Flash Point: Toluene 45 F,

Flammable Limits in Air % by Volume: Toluene lower limit 1.0%, upper limit 7.6%

N-Butyl Acetate lower limit 1.4 %, upper limit 7.6%

Solvent Naptha lower limit 1.0%, upper limit 7.5%

Extinguisher Media: Dry chemical, carbon dioxide, or foam

Special Fire Fighting Procedures: Use NIOSH/MSHA approved gas mask for fire fighting personnel. Water may be used to cool containers. If water is used fog nozzles are preferred.

Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Contain and recover liquid when possible. Use non sparking tools and equipment . In case of spillage absorb with inert material(such as vermiculite, dry sand, or earth) and place in a waste chemical container and dispose of in accordance regulations of EPA and other local, state, and federal authorities. . Do not use combustible materials such as saw dust. Do not flush to sewer.

If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US regulations require reporting spills and releases to water, soil and water in excess of reportable quantities.

Section 7: Handling & Storage

Store in a cool, dry well-ventilated location, away from heat, sparks and open flame. All equipment used when handling this product must be grounded. Empty containers may retain hazardous properties and can be dangerous. Avoid prolonged skin contact. Do not breath spray mist. .

Waste disposal methods (Consult federal, state, and local regulations): Place in closed containers.

Dispose of product in accordance with local, country, state, and federal regulations.

Section 8: Exposure Controls/Personal Protection

Engineering Controls

Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures.

Personal Protection

Inhalation: A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Skin: Wear chemical resistant gloves such as: Butyl rubber. Nitrile. or Teflon. Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The equipment must be cleaned thoroughly after each use.

Eye: Use splash goggles when eye contact due to splashing or spraying liquid is possible.

Section 9: Physical & Chemical Properties

Appearance and Odor: Clear liquid with solvent odor.

Boiling Point: Approx 320 F (160 C) for solvent

Specific Gravity (water=1): Approx 1.1 @ 68 F (20 C)

Vapor Pressure (mm Hg): Polyisocyanate: 5.2×10^{-9} mm Hg at 20 C; Toluene-22.0 , Butyl Acetate – 15 mm Hg at 20 C; Solvent Naphtha: 4 mm Hg @ 38 C

Vapor Density (Air=1): N/A, Is heavier than air.

Solubility in Water: Resin is insoluble. Reacts slowly with water to liberate Carbon dioxide gas.

Melting Point: N/A

VOC:N/A

Volatile (Weight %): N/A

% Solids= N/A

The above data are approximate or typical values and should not be used for precise design purposes.

Section 10: Stability & Reactivity

Stability: Stable

Incompatibility (Materials to Avoid): Water, amines, strong bases, alcohols, metal compounds and surface active materials.

Hazardous Decomposition Products: Acetone and TBAC both generate carbon dioxide and Carbon monoxide, Oxides of nitrogen, hydrogen cyanide, isocyanates vapors and other aliphatic fragments.

Hazardous Polymerization: May occur; Contact with moisture or other materials which react with isocyanates or temperatures over 400 F (204 C) may cause polymerization.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

Section 11: Toxicological Information

Toluene:

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 636 mg/kg [Rat]. Acute dermal toxicity (LD50): 14100 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 440 24 hours [Mouse].

Chronic Effects on Humans: CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.

May cause damage to the following organs: blood, kidneys, the nervous system, liver, brain, central nervous system (CNS).

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Lowest Published Lethal Dose: LDL [Human] - Route: Oral; Dose: 50 mg/kg LCL [Rabbit] - Route: Inhalation; Dose: 55000 ppm/40min

Special Remarks on Chronic Effects on Humans: Detected in maternal milk in human. Passes through the placental barrier in human. Embryotoxic and/or foetotoxic in animal.

May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic)

N-Butyl Acetate:

Acute Oral Toxicity:

Low toxicity:LD50>7.400 mg/kg,Rabbit

May cause damage to the following organs: Vomiting,Flank pain, kidneys, the nervous system, liver, brain, central nervous system

Acute Dermal Toxicity: LD50>14.0880 mg/kg

Rabbit Acute Inhalation Toxicity:LC50>2000ppm/4 hours,Rat

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Skin Irritation: Irritating to skin.

Eye Irritation: Moderately irritating to eyes (but insufficient to classify).

Respiratory Irritation: Inhalation of vapours or mists may cause irritation to the respiratory system.

Sensitisation: Not a skin sensitiser.

Mutagenicity: Not mutagenic.

Reproductive Toxicity: Does not impair fertility

Carcinogenicity:Not a carcinogenic effect.

Repeated Dose Toxicity :Central nervous system: repeated exposure affects the nervous system. Effects were seen at high doses only.

Respiratory system: repeated exposure affects the respiratory system. Effects were seen at high doses only.

Visual system: may cause decreased colour perception. These subtle changes have not been found to lead to functional colour vision deficits.

Auditory system: prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss.

Additional Information: Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

Section 12: Ecological Information

Mobility: Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Persistence and degradability: No data available

Bioaccumulative potential: Potentially bioaccumulate.

Aquatic toxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13: Disposal Considerations

Product disposal: Dispose of in accordance with all applicable federal, state, and local regulations. This product may produce hazardous vapors in a closed disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environmental Protection Agency" before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name: Paint

ID No: UN 1263

Hazard Class: 3

PG: II

Section 15: Regulatory Information

OSHA Hazards

Flammable liquid, Toxic by inhalation.

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute Acute aquatic toxicity

Asp. Tox. Aspiration hazard

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H401 Toxic to aquatic life. Repr. Reproductive toxicity Skin Irrit. Skin irritation

HMIS Rating Health hazard:

2 Chronic Health Hazard: * Flammability: 3 Physical Hazard 0

NFPA Health Hazard: 2 - intense or continued but not chronic exposure could cause temporary incapacitation or residual injury.

NFPA Fire Hazard: 3 – liquids or solids that can be ignited under almost all conditions.

NFPA Reactivity: 1 – Normally stable, but can become unstable at elevated temperature and pressures or may react with water with some release of energy but not violently.



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