



SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: PERMATEX® FORM-A-GASKET® #1 Sealant - 11 oz. tube, boxed
Product Code: 80003
Stock No.: 80003
Manufacturer Name: Permatex, Inc.
Address: 10 Columbus Blvd.
 Hartford, CT 06106
 USA
General Phone Number: 1-87-Permatex, (877) 376-2839
Emergency Phone Number: 800-255-3924
CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec: In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Creation Date: September 22, 2010
MSDS Revision Date: September 28, 2010
MSDS Format: According to ANSI Z400.1-2004

HMIS	
Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	X

* **Chronic Health Effects**

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Methanol	67-56-1	0.1 - 1.0 by weight
Titanium dioxide	13463-67-7	0.1 - 1.0 by weight
Ethanol	64-17-5	10 - 30 by weight
Isopropanol	67-63-0	< 5 by weight
Clay (kaolin)	1332-58-7	40- 60 by weight
Rosin	8050-09-7	20 - 30 by weight
Vegetable oil	68187-84-8	1 - 10 by weight

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview: CAUTION! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling.

Skin: May cause irritation. Prolonged or repeated contact can result in defatting and drying of the skin, which may result in skin irritation and dermatitis

	(rash).
Inhalation:	May cause irritation.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system. Central nervous system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4 - FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	Not determined.
Flash Point Method:	Not determined.
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal,

flush spill area with soap and water to remove trace residue.
Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7 - HANDLING and STORAGE

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Storage: Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.

Hygiene Practices: Wash thoroughly after handling.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description: Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

Methanol:

Guideline ACGIH: 200 ppm
Skin: yes
TLV-STEL: 250 ppm
TLV-TWA: 200 ppm

Guideline OSHA: 200 ppm
PEL-TWA: 200 ppm

Titanium dioxide:

Guideline ACGIH: 10 mg/m³
TLV-TWA: 10 mg/m³

Ethanol:

Guideline ACGIH: 1000 ppm
TLV-TWA: 1000 ppm

Guideline OSHA: 1000 ppm
PEL-TWA: 1000 ppm

Isoopropanol :

Guideline ACGIH: 200 ppm
 TLV-STEL: 400 ppm
 TLV-TWA: 200 ppm

Guideline OSHA: 400 ppm
 PEL-TWA: 400 ppm

Clay (kaolin) :

Guideline ACGIH: 2 mg/m³
 TLV-TWA: 2 mg/m³ Respirable fraction (R)

Guideline OSHA: 15 mg/m³
 PEL-TWA: 15 mg/m³ Total particulate/dust (T)
 PEL-TWA: 5 mg/m³ Respirable fraction (R)

Rosin :

Guideline ACGIH: Sensitizer.: Sen

Notes : Only established PEL and TLV values for the ingredients are listed.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Paste..
Color:	Reddish-brown
Odor:	Alcohol-like.
Boiling Point:	>180°F
Melting Point:	Not determined.
Specific Gravity:	1.4 - 1.5
Solubility:	partly miscible
Vapor Density:	Not applicable.
Vapor Pressure:	33 mm Hg @ 68 °F
Evaporation Rate:	Not applicable.
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	Not determined.
Flash Point Method:	Not determined.
Auto Ignition Temperature:	Not determined.
VOC Content:	12.7% by weight
Percent Solids by Weight	

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Heating resin above 300 F in the presence of air may cause slow oxidative decomposition.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION

Methanol:

RTECS Number:	PC1400000
Eye:	Eye - Rabbit Standard Draize test.: 40 mg Eye - Rabbit Standard Draize test.: 100 mg/24H
Skin:	Administration onto the skin - : 393 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 15800 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - : 2 mL/kg/4D (Intermittent) [Related to Chronic Data - death] Administration onto the skin - Rabbit : 20 mg/24H
Inhalation:	Inhalation - Rat LC50: 64000 ppm/4H [Details of toxic effects not reported other than lethal dose value]
Ingestion:	Oral - Rat LD50: 5600 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50: 7300 mg/kg [Details of toxic effects not reported other than lethal dose value]
Carcinogenicity:	Not listed in IARC, NTP, or OSHA

Titanium dioxide:

RTECS Number:	XR2275000
Skin:	Administration onto the skin - Human : 300 ug/3D (Intermittent)
Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans.

Ethanol:

RTECS Number:	KQ6300000
Eye:	Eye - Rabbit Standard Draize test.: 500 mg Eye - Rabbit Standard Draize test.: 500 mg/24H Eye - Rabbit Rinsed with water.: 100 mg/4S
Skin:	Administration onto the skin - Rabbit : 20000 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 400 mg Administration onto the skin - Rabbit : 20 mg/24H
Inhalation:	Inhalation - Rat LC50: 20000 ppm/10H [Details of toxic effects not reported other than lethal dose value] Inhalation - Mouse LC50: 39 gm/m ³ /4H [Details of toxic effects not reported other than lethal dose value]
Ingestion:	Oral - Mouse LD50: 3450 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50: 7 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50: 7060 mg/kg [Lungs, Thorax, or Respiration - Other changes]

Isopropanol:

RTECS Number:	NT8050000
Eye:	Eye - Rabbit Standard Draize test.: 100 mg Eye - Rabbit Standard Draize test.: 10 mg Eye - Rabbit Standard Draize test.: 100 mg/24H
Skin:	Administration onto the skin - Rabbit : 12800 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 500 mg
Inhalation:	Inhalation - Rat LC50: 16000 ppm/8H [Details of toxic effects not reported

other than lethal dose value]
Inhalation - Mouse LC50: 53000 mg/m3 [Behavioral - General anesthetic
Lungs, Thorax, or Respiration - Other changes]
Inhalation - Rat LC50: 72600 mg/m3 [Behavioral - General anesthetic
Lungs, Thorax, or Respiration - Other changes]

Ingestion: Oral - Rat LD50: 5045 mg/kg [Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Somnolence (general depressed activity)]
Oral - Mouse LD50: 3600 mg/kg [Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Somnolence (general depressed activity)]
Oral - Mouse LD50: 3600 mg/kg [Behavioral - General anesthetic]
Oral - Rat LD50: 5000 mg/kg [Behavioral - General anesthetic]

Carcinogenicity: IARC 3

Clay (kaolin) :

RTECS Number: GF1670500

Rosin :

RTECS Number: VL0480000

Skin: Administration onto the skin - Mouse : 66.68 mg/kg/20W (Intermittent)
[Tumorigenic - Protects against induction of experimental tumors]

Inhalation: Inhalation - Rat LC50: 110 mg/m3 [Behavioral - Somnolence (general depressed activity) Cardiac - Pulse rate Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)

Ingestion: Oral - Rat LD50: 3.0 mg/kg [Brain and Coverings - Other degenerative changes Liver - Other changes Biochemical - Metabolism (intermediary) - Other]
Oral - Mouse LD50: 2.2 mg/kg [Behavioral - Somnolence (general depressed activity) Cardiac - Pulse rate Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name: Non regulated.

DOT UN Number: Not applicable.

DOT Hazard Class: Not applicable.

DOT Packing Group: Not applicable.

SECTION 15 - REGULATORY INFORMATIONMethanol:

TSCA Inventory Status:	Listed
SARA:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
New Jersey:	Listed: NJ Hazardous List; Substance Number: 1222
Massachusetts:	Listed: Massachusetts Oil and Hazardous List
Pennsylvania:	Listed
Canada DSL:	Listed

Titanium dioxide:

TSCA Inventory Status:	Listed
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed

Ethanol:

TSCA Inventory Status:	Listed
Massachusetts:	Listed: Massachusetts Oil and Hazardous List
Pennsylvania:	Listed
Canada DSL:	Listed

Isopropanol:

TSCA Inventory Status:	Listed
SARA:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
New Jersey:	Listed: NJ Hazardous List; Substance Number: 1076
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed

Clay (kaolin):

TSCA Inventory Status:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed

Rosin:

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Vegetable oil:

TSCA Inventory Status:	Listed
Canada DSL:	Listed
Canadian Regulations:	WHMIS Hazard Class(es): D2B All components of this product are on the Canadian Domestic Substances List.

SECTION 16 - ADDITIONAL INFORMATION

HMIS Health Hazard: 2

HMIS Fire Hazard: 1

HMIS Reactivity: 0

HMIS Personal Protection: X

MSDS Creation Date: September 22, 2010

MSDS Revision Date: September 28, 2010

MSDS Author: Actio Corporation

Disclaimer: This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.

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