

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Name of the Product: Perma Seal II

Product Code: FG0022

Recommended Use: Coating

Producer:

Perma Incorporated
605 Springs Road
Bedford, MA 01730

Telephone Number for Information - (978)667-5161

Emergency Phone Number - (800)255-3924 ChemTel Inc.

SECTION II – HAZARD(S) IDENTIFICATION

Classification:

Skin irritation, Category 2

Eye irritation, Category 2A

Labeling:

Symbol: Exclamation mark

Flame

Signal Word: Irritant

Flammable

Hazard Statement:

Flammable liquid and vapor

Harmful in contact with skin

Causes skin irritation

Harmful if swallowed

Causes eye irritation

Precautionary Statements:

Keep container tightly closed when not in use.

Keep away from heat, sparks and or open flame.

No smoking.

Wear protective gloves and eye/face protection.

Avoid contact with skin, eyes or clothing.

Take precautionary measures against static discharge.

Store in a cool well-ventilated area.

Avoid release to the environment.

SECTION III – Composition/Information On Ingredients

Component	CAS#	Weight %
2-Butoxyethanol	111-76-2	10-20
Acetone	67-64-1	5-10
2-Propoxyethanol	2807-30-9	5-10
Formic Acid	64-18-6	1-3

SECTION IV – FIRST AID MEASURES

Skin Contact: Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue

to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove affected person to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that the vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

Inhalation: Remove affected person to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison control center or physician. If unconscious, place in a recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

SECTION V – FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous Combustion Products: None known.

Fire/Explosion Hazard: Toxic fumes, gases or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.

Protective Equipment & Precautions For Firefighters: Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. Evacuate all persons from the fire area to a safe location. Move non-burning material, as feasible, to a safe location as soon as possible. Fire fighters should be protected from potential explosion hazard while extinguishing the blaze. DO NOT extinguish a fire resulting from the flow of this flammable liquid until the flow of liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished. Use water spray to cool fire-exposed containers.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Depending on the extent of release, consider the need for fire fighters/emergency responders with adequate personal protective equipment for cleaning up. Do not eat, drink or smoke while cleaning up. Use a self-contained respirator, a mask with filter or a filtering mask. Wear protective clothing, safety glasses and impervious gloves (e.g. neoprene gloves). Ensure adequate ventilation. Avoid all sources of ignition: hot surfaces and open flames (see also section 7).

Environmental Precautions: Prevent spills from entering storm sewers or drains and contact with soil.

Methods For Cleaning Up:

Small Spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternately, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or other confined areas. Wash spillages into an effluent treatment plant if possible. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazards as the spilled product. Note, see section 1 for emergency contact information and section 13 for waste disposal.

SECTION VII – HANDLING AND STORAGE

Precautions for Safe Handling: Put on appropriate personal protective equipment. Do not get in eyes, skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container, tightly closed, when not in use. Keep away from acids. Empty containers retain product residue and can be dangerous. Do not reuse container.

Advice on General Occupational Hygiene: Eating, drinking and smoking should be prohibited in areas where this product is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional hygiene measures.

KEEP OUT OF REACH OF CHILDREN

SECTION VIII – EXPOSURE CONTROLS AND PERSONAL PROTECTION

2-Butoxyethanol 111-76-2

ACGIH	threshold limit value	20 ppm
NIOSH	recommended exposure limit	5 ppm
NIOSH	recommended exposure limit	24 mg/m ³
OSHA Z1	time weighted average	50 ppm
OSHA Z1	time weighted average	240 mg/m ³

Acetone 67-64-1

ACGIH	threshold limit value	500 ppm
ACGIH	short term exposure limit	750 ppm
OSHA Z1	short term exposure limit	1000 ppm
OSHA Z1	short term exposure limit	2400 mg/m ³
OSHA Z1	time weighted average	1000 ppm
OSHA Z1	time weighted average	2400 mg/m ³
NIOSH	time weighted average	250 ppm
NIOSH	time weighted average	590 mg/m ³

Appropriate Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Exposure Controls - Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV(s).

Individual Protection Measures:

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin/Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of gloves cannot be properly estimated.

8 hours (breakthrough time): butyl rubber

Body Protection: Personal protective equipment for the body should be selected based on the task performed and the risks involved. Should be approved by a specialist before handling this product. Recommended, safety apron.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: natural rubber (latex)

SECTION IX – PHYSICAL PROPERTIES

Appearance	Milky amber
Odor	Alcohol
Odor Threshold	Not available
Physical State	Liquid
pH	4.0-5.0
Flash Point (TCC)	39°C (102°F).
Flammability (solid, gas)	Not available
Lower and Upper Explosive Limits	Not available
Vapor Pressure	Not available
Vapor Density	Not available

Relative Density	1.00
Solubility	Water Soluble
Partition coefficient:	Not available
Auto-Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	300-600 cps. @ 25°C

SECTION X – STABILITY AND REACTIVITY

Chemical Stability: This product is stable under normal conditions.

Conditions to Avoid: Keep away from heat, open flames and other ignition sources.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Reactions: Product will not undergo hazardous polymerization.

SECTION XI – TOXICOLOGICAL INFORMATION

2-Butoxyethanol 111-76-2

Oral LD50 Rat: 745 mg/kg

Inhalation LC50 Rat: 550 ppm, 4 h

Dermal LD50 Rat: 1250 mg/kg

Formic Acid 64-18-6

Oral LD50 Rat: 1100 mg/kg

Inhalation LC50 Rat: 7500 mg/l, 4 h

SECTION XII – Ecological Information

2-Butoxyethanol 111-76-2

LC50 Oncorhynchus mykiss (Rainbow trout) 1474 mg/l, 96 h static

EC50 Daphnia magna (Water flea) 1800 mg/l, 48 h static

EC50 Pseudokirchneriella subcapitata (Green algae) 911 mg/l, 72 h static

Formic Acid 64-18-6

LC50 Leuciscus idus (Golden orfe) 100 mg/l, 96 h static

EC50 Daphnia magna (Water flea) 342 mg/L, 48 h static

Bio-accumulative Potential: There is no evidence to suggest bioaccumulation will occur.

Mobility: Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

Aquatic Toxicity: Long term effects in the aquatic environment are unknown.

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge

Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your local State Water Board or Regional Office of the EPA.

SECTION XIV – TRANSPORTATION INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. Dangerous goods descriptions may not reflect end-use or region-specific exceptions that can be applied. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT: Exempt from DOT labeling or UN packaging requirements per 49 CFR 173.150(f)
IMDG/ICAO: Flammable liquid, n.o.s. contains (Isopropanol) 3, UN1993, PGIII

SECTION XV – REGULATORY INFORMATION

TSCA Inventory Status: All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations:

Section 313 of Title III of the Superfund Amendments and Reauthorization ACT of 1986 (SARA). The following component (2-Butoxyethanol, CAS# 111-76-2) is subject to reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 12 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any reportable HAPs.

Chemical Weapons Convention (CWC):

This product does not contain any listed substances.

California Prop. 65: This product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm at levels which require reporting under the state statute.

SECTION XVI – OTHER INFORMATION

HMIS Rating: Health 1
Flammability 2
Reactivity 0
Prepared By: David Sadlo
Preparation Date: May 29, 2015

The information herein is based on data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results. Also this shall not establish a legally valid contractual relationship.

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. Furthermore, vendee assumes the risk in use of the material.

Our products are intended for sale to industrial and commercial customers. We encourage customers to inspect and test our products before use and to satisfy themselves as to suitability for their specific applications.

Warranty - The manufacturer warrants that products sold comply with specifications as represented and will perform satisfactorily if used according to the directions, or the manufacturer will refund or replace any unused portion thereof, for a period of one year from the date of manufacture. The manufacturer does not make any other warranty, or assume responsibility of any kind, expressed or implied regarding the effect or result of the products use; and assumes no responsibility of injury to vendee or third parties proximately caused by the material if reasonable safety procedures are not adhered to.