

SAFETY DATA SHEET

Issue Date 02-Jun-2015

Revision Date 02-Jun-2015

Version 1

1. IDENTIFICATION

Product identifier Product Name

- PERMAX 2.0 R (COMPONENT B)

Other means of identificationProduct CodeRT204513SynonymsNone

Recommended use of the chemical and restrictions on useRecommended UseSpray foam insulation.Uses advised againstNo information available

Details of the supplier of the safety data sheet

Emergency telephone number

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Label elements

Emergency Overview

Warning		
Hazard statements Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause respiratory irritation		
Appearance viscous	Physical state liquid	Odor Slight

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Contents may be under pressure. Open container carefully.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
Polyol Blend	NA-Mixture	30 - 70	*
1,1,1,3,3-Pentafluoropropane	460-73-1	5 - 15	*
Tertiary Amines	Proprietary	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Inhalation	Remove to fresh air.	
Ingestion	Clean mouth with water and drink afterwards plenty of water.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures		
Personal precautions	Ensure adequate ventilation, especially in confined areas.	
Environmental precautions		
Environmental precautions	See Section 12 for additional ecological information.	
Methods and material for containm	ent and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	
	7. HANDLING AND STORAGE	
Precautions for safe handling		
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.	
Conditions for safe storage, includ	ing any incompatibilities	
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.	
Incompatible materials	None known based on information supplied.	
8. EX	POSURE CONTROLS/PERSONAL PROTECTION	
Control parameters		
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational	
Appropriate engineering controls	exposure limits established by the region specific regulatory bodies.	
Engineering Controls	Showers	

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tightly fitting goggles
Skin and body protection	Protective gloves and protective clothing.
Respiratory protection	NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
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General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	liquid viscous amber	Odor Odor threshold	Slight No information available
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash point	<u>Values</u> 6-10 No information available No information available > 100 °C / > 212 °F	Remarks • Method	
Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit:	No information available No information available No information available		
Lower flammability limit: Vapor pressure Vapor density	No information available No information available No information available		
Relative density Water solubility Solubility in other solvents Partition coefficient	1.0-1.3 No information available No information available No information available		
Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity	No information available No information available No information available No information available		
Explosive properties Oxidizing properties Other Information	No information available No information available		
Softening point Molecular weight VOC Content (%) Density Bulk density	No information available No information available No information available No information available No information available		

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Conditions to avoid Extremes of temperature and direct sunlight. Incompatible materials None known based on information supplied. Hazardous Decomposition Products None known based on information supplied.

Information on likely routes of exposure

11. TOXICOLOGICAL INFORMATION

Product Information	No data available
Inhalation	May cause irritation of respiratory tract.
Eye contact	Irritating to eyes.
Skin contact	Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tertiary Amines	= 472 mg/kg (Rat) = 485 mg/kg (= 700 mg/kg (Rabbit)	-
	Rat)		

Information on toxicological effects

Symptoms

May cause an allergic skin reaction. Redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	Respiratory system.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document . mg/kg 6064 8842

12. ECOLOGICAL INFORMATION

Ecotoxicity

May cause long lasting harmful effects to aquatic life

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS		
Waste treatment methods		
Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.	
Contaminated packaging	Do not reuse container.	

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT	Not regulated
<u>TDG</u>	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
<u>RID</u>	Not regulated
ADR	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA	311/312	Hazard	Categories

Yes
No
No
No
No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product may contain trace amounts of chemicals known to the state of California to cause cancer.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Tertiary Amines	Х	X	Х
Polyol Blend	Х	-	Х

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Properties - Personal protection X

Issue Date	02-Jun-2015
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Revision Note	
No information available	
Disclaimer	

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet