

# MATERIAL SAFETY DATA SHEET

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Product Name: **SEALXPERT® RUBBER REPAIR PUTTY-RESIN**  
MSDS No: 172                      Revision No: 0

Issued by: Yogesh  
Issue Date: 15 October 2015

## Section 1 – Company Details

**Company Name:** SealXpert Products  
**Address:** 60 Kaki Bukit Place #09-11 Eunos Techpark  
Singapore 415979  
**Tel:** +65 6742 4992/6742 4998  
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**Email:** mailbox@sealxpert.com

## Section 2 – Composition

Ingredient	CAS NO.	Content (Wt%)
Polyether polyol	25791-96-2	60-70
Diphenylmethane Diisocyanate	26447-40-5	1-10
Dicyclohexylmethane -4,4'-diisocyanate	5124-30-1	20-30
Higher oligimers of methane diisocyanate (MDI)	9016-87-9	1-10
4,4'-Diphenylmethane diisocyanate	101-68-8	1-10
Proprietary ingredient(s)		0.1-1.0

## Section 3 – Hazardous Identification

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

Potential health effects:

**Eye:** Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.

**Skin:** Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.

**Inhalation:** Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.

**Ingestion:** Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic health effects:

Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target organs: Eyes. Skin. Respiratory system. Digestive 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.

Isocyanate exposure levels must be monitored. Medical supervision of all employees who handle or come in contact with isocyanates is recommended (i.e. FEV, FVC). This should include pre-employment and periodic medical examinations.

Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases, recurrent skin eczema or sensitization should be excluded from working with this product. Once sensitized no further exposure can be permitted.

## Section 4 – First Aid Measures

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers and get immediate medical attention.

**Skin contact:** Immediately wash skin with plenty of soap and water for 15 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.

**Note to physicians:** Asthmatic type symptoms may develop which may be immediate or delayed for several hours.

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## Section 5 – Fire Fighting Measures

Firefighting 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.

Suitable extinguishing media: Use carbon dioxide (CO<sub>2</sub>) or dry chemical when fighting fires involving this material.

Unsuitable extinguishing media: Water may cause frothing.

Protective equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

Unusual fire hazards: Do not reseal containers if contaminated with water, resin will react with water to release carbon dioxide. As a result of the water contamination, pressure will build up in the sealed container causing it to rupture.

## 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. Neutralize residue with appropriate neutralizer. Do not attempt to neutralize large quantities of material unless measures to control reactivity and heat generation have been taken. 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. A blanket of protein foam may be placed over spill for temporary control of isocyanate vapor.

Other precautions: Pump large quantities into closed but not sealed metal containers. Isocyanates will react with water and generate carbon dioxide; this could result in the rupture of any closed containers. Neutralize using 10 parts neutralizer to 1 part isocyanate solution. Mix and allow to stand for 48 hrs in containers, letting evolved carbon dioxide to vent. Neutralizer consist of 90% water, 3-8% concentrated ammonia (or sodium carbonate), 2% detergent.

## 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. Do not reseal container if moisture or water contamination is suspected. Water contaminated material in a sealed container may rupture due to pressure buildup.

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

Eye protection: Wear appropriate protective glasses or splash goggles.

Skin protection: Wear appropriate protective gloves and other protective apparel to prevent skin contact.

Respiratory system 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.

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## Section 9 – Physical and Chemical Characteristics

Physical state appearance:	Liquid
Color:	Brown
Odor:	Slightly musty
Boiling point:	>400°F (204.4°C)
Melting point:	Not determined
Specific gravity:	1.1 @ 77°F
Solubility:	Insoluble
Vapor density:	8.5 MDI (air = 1)
Vapor pressure:	< 10 mm Hg @77°F (MDI)
Percent volatile:	0
Evaporation rate:	Not determined
pH:	Not determined
Molecular formula :	Mixture
Molecular weight:	Mixture
Flash point:	453°F (233.8°C)
Flash point method:	Pensky-Martens Closed Cup
Lower flammable /Explosive limit:	Not determined
Upper flammable /Explosive limit:	Not determined
Auto ignition temperature:	Not determined
VOC content:	0 g/L
Percent solids by weight:	100

## Section 10 – Stability and Reactivity

Stability:	Stable under normal temperatures and pressures
Hazardous polymer:	Polymerization may occur under certain conditions.
Incompatibility materials:	Alcohols, amines, strong bases (alkali, ammonia), acids, metal compounds, moisture or water. Resin reacts with water to give off carbon dioxide.
Conditions to avoid:	Extreme heats, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Moisture and extended exposure over 85°F.

## Section 11 – Toxicological Information

Health Hazard:	Refer to section 3
Sensitization:	Not known
Mutagenicity:	Not known
Procreation Transmissibility:	Not known
Carcinogenicity:	Not known
Other health hazard information:	Unavailable

## Section 12 – Ecological Information

Eco-toxicity:	No eco-toxicity data was found for the product.
Environmental fate:	No environmental information found for this product.

## Section 13 – Disposal Considerations

Special Instructions: Observe all federal, state and local laws and regulations.

## Section 14 – Transportation Information

Transportation:	Not classified as Dangerous Goods according to Singapore Code for Transport of Dangerous Goods by Road, Rail and Air.
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## Section 15 – Regulatory Information

Observe the governmental or local regulations to use the product safely.

## Section 16 – Other Information

Discard contaminated clothing immediately. Maintain clean equipment and work areas. Avoid inhalation of fumes. Wipe up spills immediately.

### **Warning to users:**

This data sheet completes the technical notices but does not supersede them. The information contained in it is grounded to the statement of our knowledge of the product concerned at the publishing date.

Moreover, user's attention should be drawn on the possible risks incurred when a product is used for other purposes than those for which it has been designed. It does not stop in any case the user knowing and following the whole regulatory texts related to his activity. He will be the sole responsible of the precautions related to the use of the products he knows.

The aim of the whole regulatory prescriptions mentioned is to help the receiver to fulfill his duties when using the product. This list must not be considered as exhaustive. It does not stop the user from making sure that he complies with the written obligations other than those previously cited and which rule the fact of keeping and using the product for which he is the sole responsible person.