

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ref No SDS-004

Date of issue and revision: 1st April 2025

Version: 1

POW-R WRAP

Plumbing

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

POW-R WRAP

RECOMMENDED USE:

Resin impregnated fiberglass tape used to repair leaks in all types of pipes, hoses, and lines that may contain fluids, gases, or any other type of material.

PRODUCT DESCRIPTION:

Polyurethane Pipe Repair/Adhesive Wrap

PRODUCT CODE:

POW-R WRAP

GENERIC NAME:

Aromatic Isocyanate

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

Telephone: +61 2 9450 0766, E-mail address: sales@fernco.com.au

EMERGENCY TELEPHONE NUMBER:

000

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS:

Acute Toxicity (Inhalation), Category 4
Respiratory Sensitization, Category 1
Skin Sensitization, Category 1
Target Organ Toxicity (Single exposure), Category 3
Target Organ Toxicity (Repeated exposure), Category 2

GHS LABEL:

According to Regulation 2012 OSHA Hazard Communications Standard: 29 CFR Part 1910.1200

SIGNAL WORD:

DANGER

HARMFUL STATEMENTS:

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

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

PRECAUTIONARY STATEMENTS (PREVENTION):

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

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P285: In case of inadequate ventilation wear respiratory protection.

P272: Contaminated work clothing should not be allowed out of the workplace.

RESPONSE:

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314: Get medical advice/attention if you feel unwell.

P362+P364: Take off contaminated clothing and wash it before reuse.

STORAGE:

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

P405: Store locked up.

DISPOSAL:

P501: Dispose of contents/container: Follow the waste disposal requirements of your country, state, or local authorities.

HAZARDS NOT OTHERWISE CLASSIFIED:

Not Classified As Hazardous Based On IMO and DOT.

EMERGENCY OVERVIEW:

PHYSICAL APPEARANCE:

Fiberglass tape impregnated with gray liquid

IMMEDIATE CONCERNS:

Reacts violently with common materials including water, alcohols, bases, and amines. Eye irritant. Harmful if inhaled. Possible sensitizer.

POTENTIAL HEALTH EFFECTS:

EYES:

May cause significant irritation to the eyes.

SKIN:

Allergic reaction and significant irritation to the skin is possible.

INGESTION:

May cause significant irritation to the digestive tract.

INHALATION:

Irritating to the nose, throat and respiratory tract.

CARCINOGENICITY:

This product does not contain any ingredients designated by NTP, IARC, ACGIH or OSHA as a probable or suspected human carcinogens.

SENSITIZATION:

Possible sensitizer by inhalation and skin contact.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Glass, oxide; Glass	75 - 85	65997-17-3
Polyisocyanate Prepolymer based on MDI	8 - 15	67815-87-6
Methylene Bisphenyl Isocyanate	< 5	101-68-8
Polymeric Isocyanates	< 5	9016-87-9
Methylenediphenyl Diisocyanate	< 5	26447-40-5
Various Non-Hazardous Pigments	< 5	Various

COMMENTS:

Criteria for listing components in this SDS are as follows: Carcinogens are listed at 0.1% or greater; hazardous components according to regulation 2012 OSHA Hazard Communication Standard: 29 CFR 1910.1200 are listed at 1.0% or greater; non-hazardous components are not listed. This is not intended to be the complete compositional disclosure. If a "Trade Secret" (TS) is claimed in accordance to paragraph (i) of 1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:

Immediately flush with plenty of water for two minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Have eyes examined and tested by medical personnel.

SKIN:

Remove contaminated clothing and immediately wash affected skin area with plenty of soap and water. Seek medical attention. Either discard or wash contaminated clothing and shoes before reuse.

INGESTION:

If affected person is conscious and alert, give 2-3 glasses of water to drink. DO NOT INDUCE VOMITING or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

INHALATION:

Remove victim to fresh air and provide oxygen if breathing is difficult. Seek medical attention if cough or other symptoms develop.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

EYES:

May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

SKIN:

May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
INGESTION: May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

INHALATION:

May cause respiratory tract irritation. May cause dizziness, headache, nausea, and mental confusion.

ACUTE EFFECTS:

Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

CHRONIC EFFECTS:

As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to isocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to isocyanates at levels well below the TLV or PEL. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent. Chronic overexposure to isocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent. Prolonged contact with skin can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates.

NOTES TO PHYSICIAN:

Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid aerosol to prevent pulmonary edema.

SECTION 5: FIREFIGHTING MEASURES

FLAMMABLE CLASS:

Not Applicable

EXTINGUISHING MEDIA:

Dry Chemical, Foam, or Carbon Dioxide. Water is not recommended do to reaction.

OTHER CONSIDERATIONS:

Not considered flammable or combustible, but this product will burn if involved in a fire. Product emits toxic fumes when burned.

FIRE FIGHTING PROCEDURES:

Do not release runoff from fire control methods to sewers or waterways.

FIRE FIGHTING EQUIPMENT:

Fire fighting personnel are required to use respiratory and eye protection. Full fire protective equipment (Bunker Gear) and self contained breathing apparatus (SCBA) is recommended to be used for all indoor fires and any significant outdoor fires. SCBA may not be required for small outdoor fires that may easily be extinguished with a portable fire extinguisher.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of Nitrogen, Oxides of Carbon.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel absorbed material into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wash the contaminated area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Wear the appropriate personal protective equipment designated in Section 8, remove the leaking container to a containment area and place into an appropriate container to prevent any further spill.

LARGE SPILL:

Construct temporary dikes of dirt or sand to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as diatomaceous earth, sawdust, vermiculite, or any appropriate readily available material and sweep or shovel adsorbed material into closed containers for disposal. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Wear the appropriate personal protective equipment designated in Section 8, close or cap leaking valves and/or block or plug hole in leaking container. Remove the leaking containers to a containment area and place into an appropriate container to prevent any further spill. Contain material as described above and call the local fire, police, or appropriate emergency

response provider for immediate emergency assistance.

ENVIRONMENTAL PRECAUTIONS:

WATER SPILL:

Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of material into sources of water.

GENERAL PROCEDURES:

Absorb spill with an emergency spill kit, diatomaceous earth, saw dust or equivalent inert material. Shovel up and dispose of at an appropriate waste disposal facility following applicable laws and regulations.

SECTION 7: HANDLING AND STORAGE

GENERAL PROCEDURES:

Store product in original containers. Store container in a secure cool, dry, well ventilated area at 55-85 deg. F. Opened containers should be blanketed with nitrogen gas at atmospheric pressure to avoid reaction with moisture. Contamination with moisture or "basic" compounds can cause dangerous pressure buildup in closed containers.

HANDLING:

Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Avoid breathing in vapors, mists, and aerosols. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form.

STORAGE:

Store and warehouse product in an appropriate area or facility. Segregate like materials together to avoid negative chemical reactions. Protect materials from excessive exposure to heat. Observe proper storage conditions and temperatures.

STORAGE TEMPERATURE:

(55°F) Minimum to (85°F) Maximum

COMMENTS:

If bulging of containers occurs, transfer to a well ventilated area and open carefully to relieve pressure then reseal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

EXPOSURE LIMITS

Chemical Name	Type	ppm	mg/m ³	
Glass, oxide; Glass	OSHA PEL	TWA	15	
		STEL	5	
	ACGIH TLV	TWA	10	
		STEL	3	
Methylene Bisphenyl Isocyanate	OSHA PEL	TWA	.02	
		STEL	.02	
	ACGIH TLV	TWA	.005	[1]
		Supplier OEL	TWA	[1]
	STEL		[1]	[1]

ENGINEERING CONTROLS:

Proper industrial hygiene practices are required for workers and should be achieved through engineering controls including ventilation with a high turn over rate whenever feasible. When such controls are not available or not feasible to achieve full protection, respirators for workers (and others in the area) and other personal protective equipment is mandated. Exhaust air may need to be scrubbed (cleaned) or filtered to reduce environmental contamination and odors.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE:

Wear safety goggles or safety glasses with side shields when handling and mixing this material.

SKIN:

Wear impervious compatible chemical resistant protective clothing such as neoprene or butyl rubber gloves, aprons, boots or Tyvek coveralls, as appropriate to prevent contact with skin.

RESPIRATORY:

For respirator selection and training, seek professional advice. Whenever workplace conditions require a use of a respirator, follow a respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements. Wear an OSHA/NIOSH approved respirator selected on its suitability to provide adequate worker protection for the chemicals used and given working conditions including the level of airborne contamination and presence of sufficient oxygen.

WORK HYGIENIC PRACTICES:

Always follow "Good personal hygiene practices" when working with this material.

COMMENTS:

Always practice "good personal hygiene" during and after use of this materials, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. DO NOT eat, drink, or smoke in work areas that contain hazardous chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:

Heavy Liquid/Paste

ODOR:

Faint aromatic odor.

ODOR THRESHOLD:

Not determined due to breath way sensitizing properties.

COLOR:

Grey

PHYSICAL STATE COMMENTS:

Fiberglass tape impregnated with grey liquid

pH:

No data available

FLASHPOINT AND METHOD:

238°C (460°F) Pensky-Martens CC

FLAMMABLE LIMITS:

Not flammable

VAPOR PRESSURE:

< 0.001 mmHg at 25°C (77°F)

VAPOR DENSITY:

Approx. 1.14 g/cm³ @ 77 deg F

SOLUBILITY IN WATER:

Insoluble in water, reacts with evolution of CO₂

PARTITION COEFFICIENT: N-OCTANOL/WATER:

No data available

EVAPORATION RATE:

Not Determined



SPECIFIC GRAVITY:

1.14 g/cm³ at 25°C (77°F)

VISCOSITY #1:

5400 mPa. s. at 25°C (77°F)

(VOC):

≤ to 0 g/l

Notes:

None Expected.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:

Yes

HAZARDOUS POLYMERIZATION:

May occur if material is in contact with moisture.

STABILITY:

This material (product) is stable under normal ambient conditions of temperature and pressure. Follow recommendations for proper storage and use.

CONDITIONS TO AVOID:

Avoid high temperatures, sources of ignition, and moisture.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal oxidative decomposition of this product can produce CO, NO_x, HCN, and HDI vapors. Some curing agents will react to produce a large amount of heat.

INCOMPATIBLE MATERIALS:

Water, strong bases, strong acids, strong oxidizing agents, alcohols, and amines.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:**DERMAL LD50:**

> 9400 mg/kg (rabbit)

ORAL LD50:

> 2000 mg/kg (rat)

INHALATION LC50:

.49 mg/l (4 hour)

NOTES:

Toxicity data based on polymeric MDI (a mixture of monomers and higher molecular weight oligomers).

RESPIRATORY OR SKIN SENSITISATION: Skin sensitisation according to Buehler (epicutaneous test):: negative (Guinea pig, OECD Test Guideline 406)

GENERAL COMMENTS:

This product does not contain substances considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

COMMENTS:

The chemical, physical, and toxicological properties have not been thoroughly investigated or tested to the best of our knowledge.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

Ecotoxicity data based on polymeric MDI (a mixture of monomers and higher molecular weight oligomers).

BIOACCUMULATION/ACCUMULATION:

Oncorhynchus mykiss (rainbow trout), Exposure time: 112 d, < 1 BCF. Does not bioaccumulate.

GENERAL COMMENTS:

Avoid contaminating waterways.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

See the manufacturers instructions to mix together with the proper components of multi-component materials, and allow to harden. Dispose solids at an appropriate waste disposal facility according to current applicable laws and regulations.

COMMENTS:

Refer to Section 6. Accidental Release Measures for additional information.

SECTION 14: TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION):

PROPER SHIPPING NAME:

Not Regulated

OTHER SHIPPING INFORMATION:

None

AIR (ICAO/IATA):

SHIPPING NAME:

Not Regulated

SECTION 15: REGULATORY INFORMATION

VESSEL (IMO/IMDG):

SHIPPING NAME:

Not Regulated

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME:

Not Regulated

UNITED STATES:

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

FIRE:

No

PRESSURE GENERATING:

No

REACTIVITY:

Yes

ACUTE:

Yes

CHRONIC:

No

313 REPORTABLE INGREDIENTS:

CAS# 1314-98-3 Zinc Sulfide

TSCA (TOXIC SUBSTANCE CONTROL ACT):

TSCA STATUS:

All ingredients in this mixture are listed with the TSCA Chemical Substance Inventory.

REGULATIONS:

STATE REGULATIONS:

The following product components are cited on certain STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LISTS. Non-listed components may be shown in the composition section of the MSDS.

FLORIDA TOXIC SUBSTANCE(S):

Not listed

MASSACHUSETTS'S HAZARDOUS SUBSTANCE(S):

Not listed

PENNSYLVANIA HAZARDOUS SUBSTANCE CODE(S):

Not listed

NEW JERSEY:

Not listed

ILLINOIS:

Not listed

MICHIGAN:

Not listed

CALIFORNIA PROPOSITION 65:

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

CANADA:

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

SECTION 16: OTHER INFORMATION**DOMESTIC SUBSTANCE LIST (INVENTORY):**

This product or its components are listed or exempt from the Canadian Domestic Substance List (DSL). Components not listed have been submitted to Environment Canada.

COMMENTS:**EUROPEAN UNION:**

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Directive 67/548/EEC, Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

REASON FOR ISSUE:

Reviewed

PREPARED BY:

TAG

Date Prepared:

12/12/2023

DATA SOURCES:

RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

MANUFACTURER DISCLAIMER:

This SDS to the best of our knowledge conforms to the requirements of 2012 OSHA Hazard Communication Standard 29 CFR 1910.1200, and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold is subject to our standard terms and conditions, a copy of which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, **NO GUARANTY, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS, OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT.** Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.

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