POW-R Wrap

Document Ref: SDS-007
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Issue: 2

1. Identification of the Substance/Preparation and Company:

Product Name:	POW-R Wrap
Application:	Generally used in pipe connection systems in plumbing, drain, waste or sewers.
Company Details:	Fernco Ltd, Endeavour Works, Newlands Way, Valley Park, Wombwell, Barnsley, S73 0UW
Contact Details:	Tel: +44(0)1226 340222
Operating Hours:	Mon-Thurs 8:30am-5pm, Friday 8:30am-4pm
Date SDS Prepared:	August 2022

2. Hazards Identification

GHS Hazard Class	Acute Toxicity Inhalation Category 4 Sensitization Respiratory—Category 1 Sensitization Skin—Category 1 Specific Target Organ Toxicity — Single Exposure Category 3 Specific Target Organ Toxicity — Repeated Exposure — Category 2	
Signal word:	Danger	
Hazard Statement:	H332	Harmful if inhaled
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	1-131 7	May cause allergic skin reaction.
	1-4335	May cause respiratory irritation;
	1-4373	May cause damage to organs through prolonged or repeated exposure.
Precautionary Statements: Prevention	P261	Avoid breathing dust/fume/gas/mist/vapours/spray
	P271	Use only outdoors or in a well-ventilated area.

	P284	In case of inadequate ventilation wear respiratory protection.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P342 + P311	If experiencing respiratory symptoms: Call a POISON Centre or doctor.
	P302 + P352	IF ON SKIN: Wash with plenty of water.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P321	Specific treatment (see supplemental first aid on label)
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P314	Get medical advice/attention if you feel unwell.
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.

	<5 % of mixture consists of ingredients of unknown acute toxicity
HAZARD CLASSIFICATION:	Not Classified as Hazardous Based On IMO and DOT.
FIRE AND EXPLOSION:	Not considered flammable or combustible, but this product will burn if involved in a fire. Product emits toxic fumes when burned.
APPEARANCE:	Fiberglass tape impregnated with grey liquid

NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
POW-R WRAP	2			

3. Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX ^{0}/0	CAS NO.	EC NUMBER	CANADA DSL
Fiberglass	40 - 60	65997-17-3		
4,4' - Diphenylmethane Diisocyanate (MDI)	10-20	101 -68-8	202-966-0	
Polyisocyanate Prepolymer based on MDI	30 -50			
Polymeric Diphenylmethane Diisocyanate (pMDl)		9016-87-9		
Diphenylmethane Diisocyanate (MDI) Mixed Isomers		26447-40-5		
Polyester resin				

4. First Aid Measures

Description of First Aid Measures

Inhalation	Remove to fresh air. If not breathing, provide CPR (cardio pulmonary resuscitation).
Skin Contact	Get immediate medical attention.
Eye Contact	Immediately wash skin with plenty of soap and water for at least 15 minutes.
Ingestion	Remove contaminated clothing.
	Immediately flush eyes with plenty of water for at least 1 5 minutes.
	Get immediate medical attention. If swallowed do not induce vomiting, give large quantities of water to drink. Never give anything to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after Inhalation	May cause respiratory tract irritation. May cause dizziness, headache, nausea and mental confusion.

Symptoms/injuries after Skin Contact	May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin. May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after Eye Contact	
Symptoms/injuries after Ingestion	May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

Acute: 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.

Causes skin irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.
Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.

May cause irritation of the digestive tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

Chronic: 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.

5. Fire Fighting Measures

Suitable extinguishing media	Use foam, dry chemical, or carbon dioxide.
Special hazards arising from the substance or mixture	No data available.
Protective actions fire-fighters	Wear standard protective equipment and self contained breathing apparatus for firefighting if necessary.
Further information	Use water spray to cool unopened containers. Emits toxic fumes under fire conditions.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures. Wear proper personal protective equipment. Avoid breathing vapors or mist.

Environmental precautions
None

Methods and materials for containment and cleaning up
Place waste material or unused material in a waste container.

Reference to other Sections for personal protection reference section 8. For disposal reference section 13.

7. Handling and Storage

Precautions for safe handling

- Use only with adequate ventilation.
- Do not inhale vapors.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes or clothing.
- Wash hands and face after handling this material. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

- Store upright in a cool, dry place.
- Keep container closed when not in use.
- Utilize chemical segregation.
- Follow all applicable local regulations for handling and storage.

Specific uses

- Repair of leaks in all types of pipes, hoses, and lines that may contain fluids, gases, or any other type of material.

8. Exposure Controls / Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH REL
101 -68-8	0.005 ppm	0.02 ppm; 0.2 mg/m3	

Exposure controls

VENTILATION: Always provide good general, mechanical room ventilation where this chemical/material is used.

RESPIRATORY PROTECTION: Use a suitable respiratory protective device in case of insufficient ventilation.

PROTECTIVE GLOVES: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

EYE PROTECTION: Wear chemical impervious gloves at all times while working with this product. Recommended glove types include: Laminate Film, Nitrile, or Tri-polymer. Check with your company's glove supplier to ensure chemical resistance.

PROTECTIVE CLOTHING: Safety Glasses, Chemical goggles, or face shield

OTHER EQUIPMENT: Wear suitable protective clothing to prevent skin contact.

WORK/HYGIENE PRACTICES: Make safety shower, eyewash stations, and hand washing equipment available in the work area. Avoid breathing vapor. Avoid contact with eyes. Wash hands and face after handling.

9. Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR:	Grey
PHYSICAL STATE:	Fiberglass tape impregnated with grey liquid
ODOR:	Slight aromatic odour
ODOR THRESHOLD	No data available
	No data available
MELTING POINT/FREEZING POINT:	No data available
INITIAL BOILING POINT AND BOILING RANGE:	Approx. 694 ^{O}F (367.78) ^{o}c Estimated based upon components
FLASH POINT:	460 ^{O}F (237.78 ^{o}c) Pensky-Martens Closed cup ASTM D-93

EVAPORATION RATE:	No data available
FLAMMABILITY (Solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured
VAPOR PRESSURE	< 0.0001 mmHg @ 77 ^{O}F (25 ^{o}c)
VAPOR DENSITY (AIR = l)	Approx. 1.14 g/cm3 @ 77 ^{O}F (25 ^{o}c)
RELATIVE DENSITY (@25 oc):	1.14
SOLUBILITY(IES)	Insoluble — Reacts slowly with water to liberate C02 gas
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	Approximately 5400 mPas @ 77 ^{O} F (25 ^{o}c)
VOC CONTENT	No data available

10. Stability and Reactivity

Reactivity:	Water reacts with the chemicals in the tape.
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	None
Incompatibility (Materials to Avoid):	Water
Hazardous Decomposition Products:	None

11. Toxicological Information

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat):	>2000 mg/kg		9016-87-9 pMDI
	LC50 (Inhalation/Rat male):	0.49 mg/l / 4 hour		9016-87-9 pMDI
	LD50 (Dermal/Rabbit):	>9400 mg/kg		9016-87-9 pMDI
	LC50 (Inhalation/Rat male):	0.369 mg/l / 4 hour		101 -68-8
	LD50 (Oral/Rat):	>7616 mg/kg		101 -68-8

	LD50 (Dermal/Rabbit):	>9400 mg/kg		101 -68-8
Skin Corrosion/irritation		No information is available.		
Serious Eye Damage / Eye Irritation		No information is available.		
Respiratory or Skin Sensitization	Skin sensitization (local lymph node assay (LLNA)): positive (mouse, OECD Test Guideline 429)			101 -68-8
	Respiratory sensitization: positive (guinea pig)			101 -68-8
	Skin sensitization according to Buehler (epicutaneous test):: negative (guinea pig, OECD Test Guideline 406)			9016-87-9 pMDl
Germ Cell Mutagenicity	Genetic Toxicity in Vivo: Micronucleus Assa : (mouse) negative			101 -68-8
	Genetic Toxicity in Vitro: Bacterial - gene mutation assay: negative (Salmonella typhimurium, Metabolic Activation: with/without)			9016-87-9 pMDl
Carcinogenicity	NTP	Not listed		
	IARC	Not classifiable as to its carcinogenicity in humans (Group 3)		101 -68-8
	IARC	Not classifiable as to its carcinogenicity in humans (Group 3)		9016-87-9
	OSHA	Not listed		
Reproductive Toxicity		No information is available		
STOT Single Exposure	May cause respiratory irritation		Cat 3	9016-87-9

STOT — Repeated Exposure	May cause damage to organs through prolonged or repeated exposure--inhalation		Cat 2	9016-87-9
Aspiration Hazard		No information is available.		
Ames Test	Negative			9016-87-9
	Negative			101 -68-8

STOT = Specific Target Organ Toxicity

12. Ecological Information

Chemical Constituent

Toxicity:	EC50: > 100 mg/l, (activated sludge, 3 h)	101 -68-8
Persistence and degradability:	No information is available.	
Bioaccumulative potential	Oncorhynchus mykiss (rainbow trout), Exposure time: 1 12 d, < 1 BCF	101 -68-8
Mobility in soil:	No information is available.	
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical assessment not required/not conducted	
Other adverse effects:	No information is available.	

13. Disposal Considerations

Waste from residues/unused products: Follow the waste disposal requirements of your country, state, or local authorities.

Contaminated packaging: Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate: Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

14. Transport Information

DOT TRANSPORT: Not Regulated
ADR = International Carriage of Dangerous Goods by Road Not Regulated

RAIL TRANSPORT:		Not Regulated
SEA TRANSPORT:	IMDG	Not Regulated
AIR TRANSPORT:	IATA/ICAO	Not Regulated

15. Regulatory Information

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.

16. Other Information

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