Safety Data Sheet

Issue Date: 21-May-2020	Revision Date: 01-Jun-2020	Version 1		
1. IDENTIFICATION				
<u>Product identifier</u> Product Name	Pipe Repair Cast 2 x 48 & 2 x 60 (38248, 38260)			
Other means of identification SDS #	JBW-002	WELD		
Product Code	38248, 38260			
<u>Recommended use of the chemic</u> Recommended Use	cal and restrictions on use Repair.			
Details of the supplier of the safe Supplier Address J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 Phone: 903-885-7696 www.jbweld.com	<u>ty data sheet</u>			
Emergency telephone number Emergency Telephone	INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)			
	2. HAZARDS IDENTIFICATION			
Appearance Black solid	Physical state Solid	Odor Characteristic		
Classification_				
Skin sensitization	Categ	gory 1		
<u>Signal Word</u> Warning				
<u>Hazard statements</u> May cause an allergic skin reaction				
Precautionary Statements - Preve Avoid breathing dust/fume/gas/mist	ention			

Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace Wear protective gloves

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Soda lime borosilicate glass	65997-17-3	<80
4,4- methylenediphenyl diisocyanate (MDI)	101-68-8	<10
Methylenediphenyl diisocyanate	26447-40-5	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Get medical advice/attention if you feel unwell.	
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin Contact	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call Poison Control or doctor/physician.	
Ingestion	Clean mouth with water and drink afterwards plenty of water.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Causes mild skin irritation. May cause an allergic skin reaction.	
Indication of any immediate medical attention and special treatment needed		
Notes to Physician	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 Not determined.

Specific Hazards Arising from the Chemical

Not determined.

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 e	Personal precautions, protective equipment and emergency procedures		
Personal Precautions	Use personal protective equipment as required.		
Environmental precautions			
Environmental precautions	See Section 12 for additional Ecological Information.		
Methods and material for containr	ment and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.		
Methods for Clean-Up	Keep in suitable, closed containers for disposal.		
7. HANDLING AND STORAGE			
Precautions for safe handling			
Advice on Safe Handling	Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.		
Conditions for safe storage, including 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	8. EXPOSURE CONTROLS/PERSONAL PROTECTION		

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Soda lime borosilicate glass 65997-17-3	TWA: 1 fiber/cm3 respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400- 450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m ³ inhalable fraction	_	-
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	TWA: 0.005 ppm	(vacated) Ceiling: 0.02 ppm regulated under Methylene bisphenyl isocyanate (vacated) Ceiling: 0.2 mg/m ³ regulated under Methylene bisphenyl isocyanate Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	IDLH: 75 mg/m ³ Ceiling: 0.020 ppm 10 min Ceiling: 0.2 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.05 mg/m ³
Methylenediphenyl diisocyanate 26447-40-5	-	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	-

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection

Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

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	Solid Black solid Black	Odor Odor Threshold	Characteristic Not determined
Property	Values	Remarks • Method	
рН	Not determined		
Melting point / freezing point	Not determined		
Boiling point / boiling range	Not determined		
Flash point	Not determined		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not determined		
Flammability Limit in Air			
Upper flammability or explosive	Not determined		
limits			
Lower flammability or explosive	Not determined		
limits			
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	Not determined		
Water Solubility	insoluble		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Not determined		
Decomposition temperature	Not determined		
Kinematic viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		

10. STABILITY AND REACTIVITY

Not determined

Reactivity

Not reactive under normal conditions.

Chemical stability

Oxidizing Properties

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	= 31600 mg/kg (Rat)= 9200 mg/kg (Rat)	-	= 369 mg/m³ (Rat)4 h
Methylenediphenyl diisocyanate isomers (Polymeric MDI) 9016-87-9	= 49 g/kg (Rat)	> 9.4 g/kg (Rabbit)> 9400 mg/kg (Rabbit)	= 490 mg/m³ (Rat)4 h
Oleic Acid 112-80-1	= 25 g/kg (Rat)	-	-
Black Iron Oxide 1317-61-9	> 10000 mg/kg (Rat)	-	-
Methylenediphenyl diisocyanate 26447-40-5	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	= 490 mg/m³ (Rat)4 h
2,2-Dimorpholinodiethylether 6425-39-4	300 - 2000 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

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

Skin corrosion/irritation

Causes mild skin irritation.

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8		Group 3		
Methylenediphenyl diisocyanate isomers (Polymeric MDI) 9016-87-9		Group 3		
Methylenediphenyl diisocyanate 26447-40-5		Group 3		

Legend

IARC (International Agency for Research on Cancer) Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	94,349.10 mg/kg
Gas	77,777.80 mg/L
ATEmix (inhalation-dust/mist)	12.25 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Oleic Acid		205: 96 h Pimephales promelas	
112-80-1		mg/L LC50 static	
Methylenediphenyl diisocyanate	3230: 96 h Skeletonema costatum		1000: 24 h Daphnia magna mg/L
26447-40-5	mg/L EC50		ÉC50
2,2-Dimorpholinodiethylether		2150: 96 h Danio rerio mg/L LC50	
6425-39-4		static	

Persistence/Degradability Not determined.

Bioaccumulation

There is no data for this product.

<u>Mobility</u>

Chemical name	Partition coefficient
Methylenediphenyl diisocyanate	4.5
26447-40-5	

Other Adverse Effects

Not determined

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	Disposal should be in accordance with applicable regional, national and local laws and regulations.				
14. TRANSPORT INFORMATION					
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.				
DOT	Not regulated				
IATA	Not regulated				
IMDG	Not regulated				

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Soda lime borosilicate glass	Х	ACTIVE	Х	X	Х	Х	Х	Х	Х
Polymeric MDI	Х	ACTIVE	Х			Х	Х		Х
4,4- methylenediphenyl diisocyanate (MDI)	Х	ACTIVE	Х	Х	Х	X	Х	Х	Х
Methylenediphenyl diisocyanate isomers (Polymeric MDI)	Х	ACTIVE	Х		х	X	Х	X	х
Oleic Acid	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Black Iron Oxide	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
2,8,9-Triisobutyl-2,5,8,9- tetraaza-1- phosphabicyclo[3.3.3]undeca ne	Х	ACTIVE							
Methylenediphenyl diisocyanate	Х	ACTIVE	Х	х	Х	X	Х	Х	Х
2,2-Dimorpholinodiethylether	Х	ACTIVE	Х	Х	Х	Х		Х	Х

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

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
4,4- methylenediphenyl diisocyanate	5000 lb		RQ 5000 lb final RQ
(MDI)			RQ 2270 kg final RQ
101-68-8			

SARA 313

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
4,4- methylenediphenyl diisocyanate (MDI) - 101-68-8	101-68-8	<10	1.0
Methylenediphenyl diisocyanate isomers (Polymeric MDI) - 9016-87-9	9016-87-9	<5	1.0
Methylenediphenyl diisocyanate - 26447-40-5	26447-40-5	<1	1.0

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)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	X	X	X
Methylenediphenyl diisocyanate isomers (Polymeric MDI) 9016-87-9	X		
Oleic Acid 112-80-1			X
Methylenediphenyl diisocyanate 26447-40-5	Х		

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability
	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards
	Not determined	Not determined	Not determined

Special Hazards Not determined Personal Protection Not determined

Revision Note:

Revision Date:

21-May-2020 01-Jun-2020 New format

Disclaimer

Issue Date:

The information provided in this 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