

Date Revised: 03/22/2017 Date Issued: 05/21/2015

Version: 1.3

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 1: IDENTIFICATION**

## **Product Identifier**

**Product Name:** Original Gorilla Glue **Synonyms:** Polyurethane Adhesive

## **Intended Use of the Product**

Consumer Adhesives for building, carpentry, or hobby projects. **Company** 

The Gorilla Glue Company

## SECTION 2: HAZARDS IDENTIFICATION

## **Classification of the Substance or Mixture**

Classification (GHS-US)		
Acute Tox. 4 (Inhalation:dust,mist)	H332	
Skin Irrit. 2	H315	
Eye Irrit. 2B	H320	
Resp. Sens. 1	H334	
Skin Sens. 1	H317	
STOT SE 3	H335	
STOT RE 1	H372	
Full text of H-phrases: see section 16		

## Label Elements

## GHS-US Labeling

Hazard Pictograms (GHS-US)



:

	61307 61308
Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	: H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H320 - Causes eye irritation.
	H332 - Harmful if inhaled.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335 - May cause respiratory irritation.
	H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary Statements (GHS-US)	: P260 - Do not breathe vapors, mist, or spray.
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.
	P272 - Contaminated work clothing must not be allowed out of the workplace.
	P280 - Wear protective gloves, protective clothing, and eye protection.
	P284 - [In case of inadequate ventilation] wear respiratory protection.



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P302+P352 - If on skin: Wash with plenty of water. P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call a poison center or doctor if you feel unwell.

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

P337+P313 - If eye irritation persists: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.

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

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

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### **Other Hazards**

**Other Hazards:** May cause gastro-intestinal blockage if swallowed. Seek medical advice immediately. Contains isocyanates. May produce an allergic reaction.

Unknown Acute Toxicity (GHS-US) Not available

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Mixture</u>			
Name	Product Identifier	% (w/w)	Classification (GHS-US)
Polyisocyanate Prepolymer based on MDI	(CAS No) 67815-87-6	40 - 70	Acute Tox. 4 (Inhalation:dust,mist), H332
			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 1, H372
Polymeric Diphenylmethane Diisocyanate	(CAS No) 9016-87-9	10 - 30	Acute Tox. 4 (Inhalation:dust,mist), H332
(pMDI)			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 1, H372
4,4'-Diphenylmethane diisocyanate	(CAS No) 101-68-8	15 - 25	Acute Tox. 4 (Inhalation:dust,mist), H332
			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 2, H373
Diphenylmethane Diisocyanate (MDI) Mixed	(CAS No) 26447-40-5	1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332
Isomers			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335



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			STOT RE 1, H372
Additive	(CAS No) Trade Secret	<0.5	Acute Tox. 4 (Dermal), H312
			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Skin Sens. 1, H317
			STOT SE 3, H335

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

## **Description of First Aid Measures**

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Using proper respiratory protection, immediately move the exposed person to fresh air. Seek medical attention immediately.

**Skin Contact:** Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

## Most Important Symptoms and Effects Both Acute and Delayed

**General:** Irritation to eyes, skin and respiratory tract. Exposure may produce an allergic reaction. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing.

Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction.

Eye Contact: Causes eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause gastro-intestinal blockage if swallowed.

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

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### **Extinguishing Media**

**Suitable Extinguishing Media:** Carbon dioxide, dry powder, and foam. In cases of large scale fires, alcohol-resistant foams are preferred. If water is used, it should be used in very large quantities. The reaction between water and isocyanate may be vigorous. **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

## **Special Hazards Arising From the Substance or Mixture**

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

**Reactivity:** Exothermic reaction with amines and alcohols; reacts with water forming heat, CO<sub>2</sub>, and insoluble polyurea. The combined effect of CO<sub>2</sub> and heat can produce enough pressure to rupture a closed container.

### **Advice for Firefighters**

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water courses.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Fire will produce dense black smoke. Carbon oxides (CO, CO<sub>2</sub>). Nitrogen compounds.



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## **Reference to Other Sections**

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing.

### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### **Environmental Precautions**

Prevent entry to sewers and public waters.

## Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container.

**Methods for Cleaning Up:** Remove mechanically; cover remainders with wet absorbent material (e. g. sand, earth, sawdust). After approx. 15 min. transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several days. Clean up spills immediately and dispose of waste safely.

### **Reference to Other Sections**

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

## **SECTION 7: HANDLING AND STORAGE**

## **Precautions for Safe Handling**

Additional Hazards When Processed: Do not breathe vapors, mists, or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor are not adequate to prevent overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

## Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Store away from incompatible materials. Keep product away from sources of alcohols, amines, or other materials that react with isocyanates. Keep out of reach of children and animals. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Amines. Alcohols. Copper and its alloys. Water.

### **Storage Temperature:** 18 - 30 °C (64.4 - 86 °F)

## Specific End Use(s)

Consumer Adhesives for building, carpentry, or hobby projects.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.



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Polymeric Diphenylmethane	Diisocyanate (pMDI) (9016-87-9)	
Alberta	OEL TWA (mg/m <sup>3</sup> )	0.07 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	0.005 ppm
4,4'-Methylenediphenyl diis		
USA ACGIH	ACGIH TWA (ppm)	0.005 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.020 ppm
USA IDLH	US IDLH (mg/m <sup>3</sup> )	75 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	0.005 ppm
British Columbia	OEL Ceiling (ppm)	0.01 ppm
British Columbia	OEL TWA (ppm)	0.005 ppm
Manitoba	OEL TWA (ppm)	0.005 ppm
New Brunswick	OEL TWA (mg/m³)	0.051 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	0.005 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.005 ppm
Nova Scotia	OEL TWA (ppm)	0.005 ppm
Ontario	OEL Ceiling (ppm)	0.02 ppm (designated substances regulation)
Ontario	OEL TWA (ppm)	0.005 ppm (designated substances regulation)
		0.005 ppm (applies to workplaces to which the designated
		substances regulation does not apply)
Prince Edward Island	OEL TWA (ppm)	0.005 ppm
Québec	VEMP (mg/m³)	0.051 mg/m <sup>3</sup>
Québec	VEMP (ppm)	0.005 ppm
Saskatchewan	OEL STEL (ppm)	0.015 ppm
Saskatchewan	OEL TWA (ppm)	0.005 ppm
Yukon	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Yukon	OEL Ceiling (ppm)	0.02 ppm
	ate (MDI) Mixed Isomers (26447-40-5)	1
Mexico	OEL TWA (mg/m³)	0.2 mg/m <sup>3</sup>
		0.051 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	0.02 ppm
		0.005 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm
Nunavut	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Nunavut	OEL Ceiling (ppm)	0.02 ppm
Northwest Territories	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Northwest Territories	OEL Ceiling (ppm)	0.02 ppm

## **Exposure Controls**

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide sufficient ventilation to keep vapors below permissible exposure limit. Ensure all national/local regulations are observed.



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Personal Protective Equipment: Protective clothing. Safety glasses. Gloves. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Other Information: When using, do not eat, drink or smoke.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on Basic Physical and Chemical Properties

information on basic Physical and Chemical Pr	υμ	erties
Physical State	:	Liquid
Appearance	:	Brown
Odor	:	Earthy, musty
Odor Threshold	:	Not available
рН	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	0 °C (Calculated) (32 °F)
Freezing Point	:	Not available
Boiling Point	:	208 °C (406.4 °F)
Flash Point	:	> 205 °C (> 401 °F) (Pensky-Martens Closed Cup (ASTM D-93))
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Polymerizes at about 200 °C with evolution of CO <sub>2</sub>
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	< 0.0001 mm Hg @ 25 °C (77 °F)
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Density	:	1.138 g/cm³ @ 20 °C (68 °F)
Specific Gravity	:	1.137 @ 25 °C (77 °F)
Solubility	:	Insoluble in water.
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.
SECTION 10. STABILITY AND REACTIVITY		

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Exothermic reaction with amines and alcohols; reacts with water forming heat, CO<sub>2</sub>, and insoluble polyurea. The combined effect of CO<sub>2</sub> and heat can produce enough pressure to rupture a closed container.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Contact with moisture, other matrials that react with isocyanates, or temperatures above 350°F (177°C) may cause polymerization.



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**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Alcohols. Copper and its alloys. Amines. Water.

Hazardous Decomposition Products: Carbon oxides (CO, CO<sub>2</sub>). Nitrogen compounds. Isocyanates. Fire will produce dense black smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

## Information on Toxicological Effects - Product

Acute Toxicity: Based on polymeric MDI

EDSO una ECSO Data	LD50	and	LC50	Data:
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Original Gorilla Glue	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 9400 mg/kg (OECD Test Guideline 402)
LC50 Inhalation Rat	0.49 mg/l/4h
ATE US (vapors)	0.49 mg/l/4h
ATE US (dust, mist)	0.49 mg/l/4h
Additional information	Toxicity data based on polymeric MDI (a mixture of monomers and higher molecular weight oligomers). For inhalation, the test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of evidence, a modified classification for acute inhalation toxicity is justified

Skin Corrosion/Irritation: Causes skin irritation. (Rabbit, slightly irritating)

Serious Eye Damage/Irritation: Causes eye irritation.

**Respiratory or Skin Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified (Genetic Toxicity in Vitro: Bacterial - gene mutation assay: negative (Salmonella typhimurium, Metabolic Activation: with/without))

**Teratogenicity:** Rat, female, inhalation, gestation days 6-15, 6 hrs/day, NOAEL (teratogenicity): 12 mg/m<sup>3</sup>, NOAEL (maternal) 4 mg/m<sup>3</sup>. No teratogenic effects observed at doses tested. Fetotoxicity seen only with maternal toxicity.

Carcinogenicity: Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs through prolonged or repeated exposure. **Reproductive Toxicity:** Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. May cause gastro-intestinal blockage if swallowed.

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

Original Gorilla Glue	
NOAEL (inhalation,rat,dust/mist/fume, 90 days)	1 mg/m <sup>3</sup> (6hrs/day 5 days/week) Irritation to lungs and nasal cavity.
NOAEL (inhalation, rat, dust/mist/fume, 2 years)	0.2 (6 hrs/day 5 days/week). Irritation to lungs and nasal cavity

Information on Toxicological Effects - Ingredient(s) LD50 and LC50 Data:



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	(	
Polyisocyanate Prepolymer based on MDI	(67815-87-6)	
Same as Original Gorilla Glue. See above.		
Polymeric Diphenylmethane Diisocyanate	(pMDI) (9016-87-9	
Same as Original Gorilla Glue. See above.		
4,4'-Diphenymethane diisocyanate (101-68	8-8)	
LD50 Oral Rat		7616 mg/kg
LD50 Dermal Rabbit	> 9400 mg/kg	
LC50 Inhalation Rat	0.368 mg/l/4h	
Additional information		For inhalation, the test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of evidence, a modified classification for acute inhalation toxicity is justified
Diphenylmethane Diisocyanate (MDI) Mix	ed Isomers (26447-	40-5)
Same as Original Gorilla Glue. See above.		
Additive (Trade Secret)		
LD50 Oral Rat		2200 mg/kg
D50 Dermal Rabbit 1410 mg/kg		
Polymeric Diphenylmethane Diisocyanate	(pMDI) (9016-87-9	)
IARC Group		3
Polymeric Diphenylmethane Diisocyanate	(pMDI) (9016-87-9	
IARC Group		3
Diphenylmethane Diisocyanate (MDI) Mixed Isomers (26447-40-5)		
IARC Group 3		
SECTION 12: ECOLOGICAL INFORMA	TION	
Toxicity	nen	
	n polymeric MDI (a	mixture of monomers and higher molecular weight oligomers).
Toxicity to Fish		
LC0 (Canio rerio (zebra fish))	> 1000 mg/l, 96 h	
LC0 (Oryzias latipes (Orange-red killfish))	> 3000 mg/l, 96 h	
Toxicity to Aquatic Invertebrates		
EC50 (Water flea (daphnia magna))	> 1000 mg/l, 24 h	
Toxicity to Aquatic Plants		
NOEC	1640 mg/l, End Po	pint: growth (Green algae (Scenedesmus subspicatus), 72 h)
Toxicity to Microorganisms	1	
EC50 (activated sludge)	> 100 mg/l, 3 h	
4,4'-Diphenymethane diisocyanate (101-68	8-8)	
Toxicity to Fish		
LC50 (Zebra fish (Brachydanio rerio))	> 500 mg/l, 24 h	
Toxicity to Aquatic Invertebrates		
EC50 (Water flea (daphnia magna))	> 500 mg/l, 24 h	



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Additive	
Toxicity to Fish	
LC50 (Fathead minnow (Pimephales promelas)) 134 mg/l,	96 h
Persistence and Degradability	
Original Gorilla Glue	
	r this product was 0%, exposure time: 28 days, i.e. not degradable.
Biodegradation 0 % after 28 days	, , , , , , , , , , , , , , , , , , , ,
Bioaccumulative Potential	
Original Gorilla Glue	
	mykiss (rainbow trout), Exposure time: 112 d (does not bioaccumulate)
Mobility in Soil Not available	
Other Adverse Effects	
Other Information: Avoid release to the environment.	
ECTION 13: DISPOSAL CONSIDERATIONS	
Sewage Disposal Recommendations: Do not dispose of wast	e into sewer.
• •	al in accordance with all local, regional, national, provincial, territorial
and international regulations.	
ECTION 14: TRANSPORT INFORMATION	
In Accordance with DOT Not regulated for transport	
In Accordance with IMDG Not regulated for transport	
In Accordance with IATA Not regulated for transport	
In Accordance with TDG Not regulated for transport	
ECTION 15: REGULATORY INFORMATION	
US Federal Regulations	
Original Gorilla Glue	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Delayed (chronic) health hazard
Polyisocyanate Prepolymer based on MDI (67815-87-6)	
Listed on the United States TSCA (Toxic Substances Control A	.ct) inventory
Polymeric Diphenylmethane Diisocyanate (pMDI) (9016-87-	
Listed on the United States TSCA (Toxic Substances Control A	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
4,4'-Diphenymethane diisocyanate (101-68-8)	
Listed on the United States TSCA (Toxic Substances Control A	ct) inventory
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Diphenylmethane Diisocyanate (MDI) Mixed Isomers (2644)	•
Listed on the United States TSCA (Toxic Substances Control A	ct) inventory
US State Regulations	
Original Gorilla Glue	
State or local regulations	
	nate (CAS # 103-71-9) and monochlorobenzene (CAS # 108-90-7) as ns chemical(s) known to the State of California to be Carcinogenic.
Weight % Component CAS #	



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14	A + -   -  -   -	75.07.0
	Acetaldehyde	75-07-0
- 1-1-	Furan	110-00-9
• •	Propylene Oxide	75-56-9
Polymeric Diphenylmetha		
U.S New Jersey - Right to		
4,4'-Methylenediphenyl d		3)
U.S Massachusetts - Righ		
U.S Pennsylvania - RTK (F		onmental Hazard List
U.S Pennsylvania - RTK (F		
Diphenylmethane Diisocya		omers (26447-40-5)
U.S Massachusetts - Righ		
U.S New Jersey - Right to	Know Hazardous Sul	ostance List
Canadian Regulations		
Original Gorilla Glue		
WHMIS Classification	Class D Division	2 Subdivision A - Very toxic material causing other toxic effects
	Class D Division	2 Subdivision B - Toxic material causing other toxic effects
Polyisocyanate Prepolyme	er based on MDI (678	15-87-6)
Listed on the Canadian DSI		
Polymeric Diphenylmetha		
Listed on the Canadian DSI		
WHMIS Classification	•	1 Subdivision A - Very toxic material causing immediate and serious toxic effects
		2 Subdivision A - Very toxic material causing other toxic effects
		2 Subdivision B - Toxic material causing other toxic effects
4,4'-Methylenediphenyl d		
Listed on the Canadian DSI		•
Listed on the Canadian IDL	•	
IDL Concentration 0.1 %	(	
WHMIS Classification	Class D Division	2 Subdivision A - Very toxic material causing other toxic effects
		2 Subdivision B - Toxic material causing other toxic effects
Diphenylmethane Diisocya		
Listed on the Canadian DSI		
WHMIS Classification	·	1 Subdivision A - Very toxic material causing immediate and serious toxic effects
		2 Subdivision A - Very toxic material causing other toxic effects
		2 Subdivision B - Toxic material causing other toxic effects
This product has been clas		vith the hazard criteria of the Controlled Products Regulations (CPR) and the SDS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date Other Information

- : 03/22/2017
- : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.





Date Revised: 03/22/2017 Date Issued: 05/21/2015

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure



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## **SECTION 1: IDENTIFICATION**

Product Identifier Product Name: Gorilla Glue Synonyms: Polyurethane Adhesive Intended Use of the Product Consumer Adhesives for building, carpentry, or hobby projects. Company The Gorilla Glue Company

## SECTION 2: HAZARDS IDENTIFICATION

## **Classification of the Substance or Mixture**

Classification (GHS-US)	
Acute Tox. 4 (Inhalation:dust,mist)	H332
Skin Irrit. 2	H315
Eye Irrit. 2B	H320
Resp. Sens. 1	H334
Skin Sens. 1	H317
STOT SE 3	H335
STOT RE 1	H372

Full text of H-phrases: see section 16

## Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	: H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H320 - Causes eye irritation.
	H332 - Harmful if inhaled.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335 - May cause respiratory irritation.
	H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary Statements (GHS-US)	: P260 - Do not breathe vapors, mist, or spray.
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.
	P272 - Contaminated work clothing must not be allowed out of the workplace.
	P280 - Wear protective gloves, protective clothing, and eye protection.



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P284 - [In case of inadequate ventilation] wear respiratory protection.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center or doctor if you feel unwell.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

## **Other Hazards**

**Other Hazards:** May cause gastro-intestinal blockage if swallowed. Seek medical advice immediately. Contains isocyanates. May produce an allergic reaction.

Unknown Acute Toxicity (GHS-US) Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>			
Name	Product Identifier	% (w/w)	Classification (GHS-US)
Polyisocyanate Prepolymer based on MDI	(CAS No) 67815-87-6	40 - 70	Acute Tox. 4 (Inhalation:dust,mist), H332
			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 1, H372
Polymeric Diphenylmethane Diisocyanate	(CAS No) 9016-87-9	10 - 30	Acute Tox. 4 (Inhalation:dust,mist), H332
(pMDI)			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 1, H372
4,4'-Diphenylmethane diisocyanate	(CAS No) 101-68-8	15 - 25	Acute Tox. 4 (Inhalation:dust,mist), H332
			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			STOT SE 3, H335
			STOT RE 2, H373
Diphenylmethane Diisocyanate (MDI) Mixed	(CAS No) 26447-40-5	1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332
Isomers			Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317



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			STOT SE 3, H335 STOT RE 1, H372
Additive	(CAS No) Trade Secret	<0.5	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317 STOT SE 3, H335

## Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

## **Description of First Aid Measures**

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). **Inhalation:** Using proper respiratory protection, immediately move the exposed person to fresh air. Seek medical attention immediately.

**Skin Contact:** Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Irritation to eyes, skin and respiratory tract. Exposure may produce an allergic reaction. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing.

Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction.

Eye Contact: Causes eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause gastro-intestinal blockage if swallowed.

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

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

## Extinguishing Media

**Suitable Extinguishing Media:** Carbon dioxide, dry powder, and foam. In cases of large scale fires, alcohol-resistant foams are preferred. If water is used, it should be used in very large quantities. The reaction between water and isocyanate may be vigorous. **Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

**Reactivity:** Exothermic reaction with amines and alcohols; reacts with water forming heat, CO<sub>2</sub>, and insoluble polyurea. The combined effect of CO<sub>2</sub> and heat can produce enough pressure to rupture a closed container.

### **Advice for Firefighters**

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water courses.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Fire will produce dense black smoke. Carbon oxides (CO, CO<sub>2</sub>). Nitrogen compounds.



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## **Reference to Other Sections**

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing.

#### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

### For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### **Environmental Precautions**

Prevent entry to sewers and public waters.

## Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container.

**Methods for Cleaning Up:** Remove mechanically; cover remainders with wet absorbent material (e. g. sand, earth, sawdust). After approx. 15 min. transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several days. Clean up spills immediately and dispose of waste safely.

### **Reference to Other Sections**

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

## **SECTION 7: HANDLING AND STORAGE**

## **Precautions for Safe Handling**

Additional Hazards When Processed: Do not breathe vapors, mists, or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor are not adequate to prevent overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

## Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Store away from incompatible materials. Keep product away from sources of alcohols, amines, or other materials that react with isocyanates. Keep out of reach of children and animals. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Amines. Alcohols. Copper and its alloys. Water.

### **Storage Temperature:** 18 - 30 °C (64.4 - 86 °F)

## Specific End Use(s)

Consumer Adhesives for building, carpentry, or hobby projects.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control Parameters**

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.



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Polymeric Diphenylmethane	e Diisocyanate (pMDI) (9016-87-9)	
Alberta	OEL TWA (mg/m <sup>3</sup> )	0.07 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	0.005 ppm
4,4'-Methylenediphenyl diis		
USA ACGIH	ACGIH TWA (ppm)	0.005 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.020 ppm
USA IDLH	US IDLH (mg/m <sup>3</sup> )	75 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	0.005 ppm
British Columbia	OEL Ceiling (ppm)	0.01 ppm
British Columbia	OEL TWA (ppm)	0.005 ppm
Manitoba	OEL TWA (ppm)	0.005 ppm
New Brunswick	OEL TWA (mg/m³)	0.051 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	0.005 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.005 ppm
Nova Scotia	OEL TWA (ppm)	0.005 ppm
Ontario	OEL Ceiling (ppm)	0.02 ppm (designated substances regulation)
Ontario	OEL TWA (ppm)	0.005 ppm (designated substances regulation)
		0.005 ppm (applies to workplaces to which the designated
		substances regulation does not apply)
Prince Edward Island	OEL TWA (ppm)	0.005 ppm
Québec	VEMP (mg/m <sup>3</sup> )	0.051 mg/m <sup>3</sup>
Québec	VEMP (ppm)	0.005 ppm
Saskatchewan	OEL STEL (ppm)	0.015 ppm
Saskatchewan	OEL TWA (ppm)	0.005 ppm
Yukon	OEL Ceiling (mg/m³)	0.2 mg/m <sup>3</sup>
Yukon	OEL Ceiling (ppm)	0.02 ppm
Diphenylmethane Diisocyan	ate (MDI) Mixed Isomers (26447-40-5)	
Mexico	OEL TWA (mg/m³)	0.2 mg/m <sup>3</sup>
		0.051 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	0.02 ppm
		0.005 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm
Nunavut	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Nunavut	OEL Ceiling (ppm)	0.02 ppm
Northwest Territories	OEL Ceiling (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Northwest Territories	OEL Ceiling (ppm)	0.02 ppm

### **Exposure Controls**

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide sufficient ventilation to keep vapors below permissible exposure limit. Ensure all national/local regulations are observed.



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Personal Protective Equipment: Protective clothing. Safety glasses. Gloves. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Other Information: When using, do not eat, drink or smoke.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on Basic Physical and Chemical Properties

information on basic Physical and Chemical Pr	op	erties
Physical State	:	Liquid
Appearance	:	Brown
Odor	:	Earthy, musty
Odor Threshold	:	Not available
рН	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	0 °C (Calculated) (32 °F)
Freezing Point	:	Not available
Boiling Point	:	208 °C (406.4 °F)
Flash Point	:	> 205 °C (> 401 °F) (Pensky-Martens Closed Cup (ASTM D-93))
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Polymerizes at about 200 °C with evolution of CO <sub>2</sub>
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	< 0.0001 mm Hg @ 25 °C (77 °F)
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Density	:	1.138 g/cm³ @ 20 °C (68 °F)
Specific Gravity	:	1.137 @ 25 °C (77 °F)
Solubility	:	Insoluble in water.
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.
<b>ΣΕΛΤΙΩΝΙ 10: STABILITY AND DEACTIVITY</b>		

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Exothermic reaction with amines and alcohols; reacts with water forming heat, CO<sub>2</sub>, and insoluble polyurea. The combined effect of CO<sub>2</sub> and heat can produce enough pressure to rupture a closed container.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Contact with moisture, other matrials that react with isocyanates, or temperatures above 350°F (177°C) may cause polymerization.



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**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Alcohols. Copper and its alloys. Amines. Water.

Hazardous Decomposition Products: Carbon oxides (CO, CO<sub>2</sub>). Nitrogen compounds. Isocyanates. Fire will produce dense black smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

## Information on Toxicological Effects - Product

Acute Toxicity: Based on polymeric MDI

LD50	and	LC50	Data:

Gorilla Glue	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 9400 mg/kg (OECD Test Guideline 402)
LC50 Inhalation Rat	0.49 mg/l/4h
ATE US (vapors)	0.49 mg/l/4h
ATE US (dust, mist)	0.49 mg/l/4h
Additional information	Toxicity data based on polymeric MDI (a mixture of monomers and higher molecular weight oligomers). For inhalation, the test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of evidence, a modified classification for acute inhalation toxicity is justified

Skin Corrosion/Irritation: Causes skin irritation. (Rabbit, slightly irritating)

Serious Eye Damage/Irritation: Causes eye irritation.

**Respiratory or Skin Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified (Genetic Toxicity in Vitro: Bacterial - gene mutation assay: negative (Salmonella typhimurium, Metabolic Activation: with/without))

**Teratogenicity:** Rat, female, inhalation, gestation days 6-15, 6 hrs/day, NOAEL (teratogenicity): 12 mg/m<sup>3</sup>, NOAEL (maternal) 4 mg/m<sup>3</sup>. No teratogenic effects observed at doses tested. Fetotoxicity seen only with maternal toxicity.

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure. Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Causes skin irritation. Exposure may produce an allergic reaction.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. May cause gastro-intestinal blockage if swallowed.

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

Gorilla Glue	
NOAEL (inhalation,rat,dust/mist/fume, 90 days)	1 mg/m <sup>3</sup> (6hrs/day 5 days/week) Irritation to lungs and nasal cavity.
NOAEL (inhalation,rat,dust/mist/fume, 2 years)	0.2 (6 hrs/day 5 days/week). Irritation to lungs and nasal cavity

Information on Toxicological Effects - Ingredient(s) LD50 and LC50 Data:



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Polyisocyanate Prepolymer based on MDI	(67815-87-6)		
Same as Gorilla Glue. See above.	(07815-87-0)		
Polymeric Diphenylmethane Diisocyanate	(nMDI) (9016-87-9	<u> </u>	
Same as Gorilla Glue. See above.	(pmb) (5010-87-5)	1	
4,4'-Diphenymethane diisocyanate (101-6 LD50 Oral Rat	5-8)	7616 mg/kg	
LD50 Dermal Rabbit		> 9400 mg/kg	
LC50 Inhalation Rat Additional information		0.368 mg/l/4h For inhalation, the test atmosphere generated in the animal study is	
		not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of evidence, a modified classification for acute inhalation toxicity is justified	
Diphenylmethane Diisocyanate (MDI) Mix	ed Isomers (26447-	40-5)	
Same as Gorilla Glue. See above.			
Additive (Trade Secret)			
LD50 Oral Rat		2200 mg/kg	
LD50 Dermal Rabbit		1410 mg/kg	
Polymeric Diphenylmethane Diisocyanate	(pMDI) (9016-87-9)		
IARC Group		3	
Polymeric Diphenylmethane Diisocyanate	(pMDI) (9016-87-9)		
IARC Group		3	
Diphenylmethane Diisocyanate (MDI) Mixed Isomers (26447-4		40-5)	
IARC Group		3	
SECTION 12: ECOLOGICAL INFORMA	TION		
Toxicity	non		
	n polymeric MDI (a	mixture of monomers and higher molecular weight oligomers).	
Toxicity to Fish			
LC0 (Canio rerio (zebra fish))	> 1000 mg/l, 96 h		
LC0 (Oryzias latipes (Orange-red killfish))	> 3000 mg/l, 96 h		
Toxicity to Aquatic Invertebrates			
EC50 (Water flea (daphnia magna))	> 1000 mg/l, 24 h		
Toxicity to Aquatic Plants	Γ		
NOEC	1640 mg/l, End Po	oint: growth (Green algae (Scenedesmus subspicatus), 72 h)	
Toxicity to Microorganisms			
EC50 (activated sludge)     > 100 mg/l, 3 h			
4,4'-Diphenymethane diisocyanate (101-6	8-8)		
Toxicity to Fish	<i>•</i>		
LC50 (Zebra fish (Brachydanio rerio))	> 500 mg/l, 24 h		
Toxicity to Aquatic Invertebrates	. 500 // 0.41		
EC50 (Water flea (daphnia magna))	> 500 mg/l, 24 h		



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Additive			
Toxicity to Fish			
LC50 (Fathead minnow (Pimephales pro	melas)) 134 mg/l, 9	6 h	
Persistence and Degradability			
Gorilla Glue			
Persistence and Degradability	Biodegradation for t	his product was 0%, exposure time: 28 days, i.e. not degradable.	
Biodegradation	0 % after 28 days		
Bioaccumulative Potential			
Gorilla Glue			
BCF fish 1	< 1 Oncorhynchus m	ykiss (rainbow trout), Exposure time: 112 d (does not bioaccumulate)	
Mobility in Soil Not available			
Other Adverse Effects			
Other Information: Avoid release to the	environment		
SECTION 13: DISPOSAL CONSIDERA			
Sewage Disposal Recommendations: Do		into sewer	
		in accordance with all local, regional, national, provincial, territorial	
and international regulations.			
SECTION 14: TRANSPORT INFORM	ATION		
	ated for transport		
	ated for transport		
6	ated for transport		
-	ated for transport		
SECTION 15: REGULATORY INFORM	-		
	MATION		
US Federal Regulations			
Gorilla Glue		Immediate (agute) health hazard	
SARA Section 311/312 Hazard Classes		Immediate (acute) health hazard Delayed (chronic) health hazard	
Delvice wants Drenchmar based or M			
Polyisocyanate Prepolymer based on M		) in contour.	
Listed on the United States TSCA (Toxic S			
Polymeric Diphenylmethane Diisocyana			
Listed on the United States TSCA (Toxic S Listed on United States SARA Section 313		) inventory	
	)	10%	
SARA Section 313 - Emission Reporting     1.0 %		1.0 %	
4,4'-Diphenymethane diisocyanate (101		) inventory	
Listed on the United States TSCA (Toxic S		) inventory	
Listed on United States SARA Section 313	)	1.0 %	
SARA Section 313 - Emission Reporting	lived leaves (20117		
Diphenylmethane Diisocyanate (MDI) M		•	
	ubstances Control Act	) inventory	
Listed on the United States TSCA (Toxic S			
US State Regulations			
US State Regulations			
US State Regulations Gorilla Glue State or local regulations This product contains a trace (ppm) amo	unt of phenyl isocyana	ate (CAS # 103-71-9) and monochlorobenzene (CAS # 108-90-7) as chemical(s) known to the State of California to be Carcinogenic.	



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<1 nnm	Acotaldobudo	75.07.0
<1 ppm 1-5 ppm	Acetaldehyde Furan	75-07-0 100-00-9
	Propylene Oxide	75-56-9
<1 ppm		
Polymeric Diphenylmetha		
U.S New Jersey - Right t		
4,4'-Methylenediphenyl		8)
U.S Massachusetts - Rig		
U.S Pennsylvania - RTK (		onmental Hazard List
U.S Pennsylvania - RTK (		
Diphenylmethane Diisocy		somers (26447-40-5)
U.S Massachusetts - Rig		
U.S New Jersey - Right t	o know Hazardous Su	DStance List
Canadian Regulations		
Gorilla Glue		
WHMIS Classification	Class D Division	2 Subdivision A - Very toxic material causing other toxic effects
	Class D Division	2 Subdivision B - Toxic material causing other toxic effects
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Polyisocyanate Prepolym	er based on MDI (678	315-87-6)
Polyisocyanate Prepolym Listed on the Canadian DS		•
	SL (Domestic Substanc	es List)
Listed on the Canadian DS	SL (Domestic Substanc ane Diisocyanate (pM	es List) DI) (9016-87-9)
Listed on the Canadian DS Polymeric Diphenylmetha	EL (Domestic Substanc ane Diisocyanate (pM EL (Domestic Substanc	es List) DI) (9016-87-9)
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contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date Other Information**  : 02/04/2016

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.





Date Revised: 02/04/2016 Date Issued: 05/21/2015

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure