

## SAFETY DATA SHEET

## GorillaPro™ PU5 Part A

Version 1.0

Revision Date 08/26/2020

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	GorillaPro™ PU5 Part A
Product code	:	10000013422

### Manufacturer or supplier's details

Company	:	H.B. Fuller Engineering Adhesives
Address	:	1200 Willow Lake Boulevard Vadnais Heights, MN 55110
Telephone	:	1-888-423-8553

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### Recommended use of the chemical and restrictions on use

Recommended use	:	Isocyanate based product
Restrictions on use	:	For industrial use only.

### **SECTION 2. HAZARDS IDENTIFICATION**

#### **Emergency Overview**

Appearance	liquid
Color	light yellow
Odor	characteristic

### **GHS Classification**

### **GHS** label elements



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Brute Strength. Professional Grade."

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Hazard pictograms



Signal Word

### Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

#### **Precautionary Statements:**

**Prevention:** P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. 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/ eye protection/ face protection. P285 In case of inadequate ventilation wear respiratory protection.

**Response:** P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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/ doctor. P362 Take off contaminated clothing and wash 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 to an approved waste disposal plant.

### Potential Health Effects

Aggravated Medical Condition Symptoms of Overexposure	<ul><li>None known.</li><li>Breathing difficulties</li></ul>
Carcinogenicity:	
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

Mixture



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## Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
4,4'-methylenediphenyl diisocyanate	101-68-8	50 - 70
Actual concentration is withheld as a trade secret		

### **SECTION 4. FIRST AID MEASURES**

General advice	: Show this material safety data sheet to the doctor in attendance.
If inhaled	: Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Get medical attention if irritation develops and persists. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use.
In case of eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	: Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.
Most important symptoms and effects, both acute and delayed	: Breathing difficulties

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.	
Specific hazards during fire fighting	: Burning produces irritant fumes.	
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatu Use personal protective equipment.	JS.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and	: Refer to protective measures listed in sections 7 and 8.
emergency procedures Methods and materials for	: Soak up with inert absorbent material.



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containment and cleaning up Shovel into suitable container for disposal. Neutralize with the following product(s): Ammonia				
SECTION 7. HANDLING AND STORAGE				
Local/Total ventilation	: Use only with adequate ventilation.			
Advice on safe handling	: Protect from moisture. Avoid inhalation, ingestion and contact with skin and eyes.			
Materials to avoid	: No special restrictions on storage with other products.			

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0.005 ppm	ACGIH
		С	0.02 ppm 0.2 mg/m3	OSHA Z-1
		С	0.02 ppm 0.2 mg/m3	OSHA P0
		PEL	0.005 ppm 0.051 mg/m3	CAL PEL

Engineering measures	:	Use local exhaust ventilation or other engineering controls to
		minimize exposures.

## Personal protective equipment

Respiratory protection	•	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection Material	:	Nitrile rubber
Eye protection	:	Safety glasses with side-shields



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Hygiene measures	: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.
CTION 9. PHYSICAL AND CHE	EMICAL PROPERTIES
Appearance Color Odor Odor Threshold	: liquid : light yellow : characteristic : No data available
Melting point/freezing point	: is not determined
Initial boiling point and boiling range	: is not determined
Evaporation rate Flammability (solid, gas)	<ul><li>is not determined</li><li>Not classified as a flammability hazard</li></ul>
Upper explosion limit	: Upper flammability limit is not determined
Lower explosion limit	: Lower flammability limit is not determined
Density Solubility(ies)	: 1.11 g/cm3
Water solubility	: is not determined
Partition coefficient: n- octanol/water	: No data available
Autoignition temperature	: is not determined
Viscosity Viscosity, kinematic	: is not determined

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.
Chemical stability	: The product is chemically stable.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Incompatible materials	: Amines Strong acids and strong bases
Hazardous decomposition products	: Stable under normal conditions.



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## SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

### Product:

Acute inhalation toxicity	: Acute toxicity estimate : 3 mg/l
	Exposure time: 4 h
	Test atmosphere: dust/mist
	Method: Calculation method

#### **Components:**

4,4'-methylenediphenyl diisocyanate:		
Acute inhalation toxicity	:	LC50 : 1.5 mg/l
		Exposure time: 4 h
		Test atmosphere: dust/mist

#### Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### STOT-single exposure

No data available

#### STOT-repeated exposure

No data available

#### Aspiration toxicity

No data available



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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

#### Mobility in soil

No data available

Other adverse effects

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

### **Disposal methods**

Waste from residues : To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

## **SECTION 14. TRANSPORT INFORMATION**

### Special precautions for user

Not applicable

#### **Domestic regulation**

### 49 CFR

Not regulated as a dangerous good

### **International Regulations**

### UNRTDG

Not regulated as a dangerous good



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## IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## SECTION 15. REGULATORY INFORMATION

	SARA 31	1/312 Hazards :	Acute toxicity (any route of exposu Respiratory or skin sensitization Specific target organ toxicity (sing Skin corrosion or irritation Serious eye damage or eye irritation	le or repeated ex	posure)
	SARA 30	<b>2</b> :	This material does not contain any co EHS TPQ.	mponents with a se	ection 302
	SARA 31	<b>3</b> :	The following components are subjective by SARA Title III, Section 313:	t to reporting level	s established
			4,4'-methylenediphenyl diisocyanate	10	)1-68-8
	Clean Air	Act			
		ving chemical(s) are lis	sted as HAP under the U.S. Clean A	Air Act, Section 1	12 (40 CFR
	61):	4,4'-methylenedipheny	l diisocyanate	101-68-8	
	US State	Regulations			
	California	a Prop 65	Please contact Supplier for more	information.	
The	DSL Inventori	es LegendTSCA (US	e reported in the following invent All components of this product are A), DSL (Canada), REACH(Europe) KECI (Korea), PICCS (Philippines)	on the Canadian ), AICS (Australia	a), NZIoC



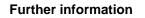
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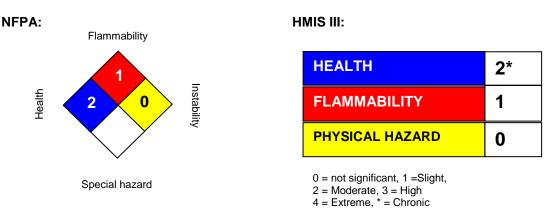
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## **SECTION 16. OTHER INFORMATION**

Prepared by: Global Regulatory Department - phone: 1-651-236-5842 - email: msds.request@hbfuller.com





The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.



## SAFETY DATA SHEET

## GorillaPro™ PU5 Part B

Version 1.0

Revision Date 08/26/2020

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	GorillaPro™ PU5 Part B
Product code	:	10000013423

#### Manufacturer or supplier's details

Company	:	H.B. Fuller Engineering Adhesives
Address	:	1200 Willow Lake Boulevard Vadnais Heights, MN 55110
Telephone	:	1-888-423-8553

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### Recommended use of the chemical and restrictions on use

Recommended use	:	Epoxy curing agent
Restrictions on use	:	For industrial use only.

### **SECTION 2. HAZARDS IDENTIFICATION**

#### **Emergency Overview**

Appearance	liquid
Color	white
Odor	characteristic

#### **GHS Classification**

Not a hazardous substance or mixture.

#### **GHS** label elements

Not a hazardous substance or mixture.

#### Potential Health Effects

#### Carcinogenicity:

IARC

**OSHA** 

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or



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NTP	equal to 0.1% is on OSHA's list of regulated carcinogens. No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### **Hazardous ingredients**

Chemical name	CAS-No.	Concentration [%]
calcium carbonate	471-34-1	50 - 70
kaolin	1332-58-7	20 - 30
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Actual concentration is withheld as a trade secret

## **SECTION 4. FIRST AID MEASURES**

General advice	: Show this material safety data sheet to the doctor in attendance.
If inhaled	<ul> <li>Move to fresh air.</li> <li>If not breathing, give artificial respiration.</li> <li>Keep patient warm and at rest.</li> <li>Consult a physician after significant exposure.</li> </ul>
In case of skin contact	<ul> <li>Take off all contaminated clothing immediately.</li> <li>Wash off immediately with soap and plenty of water.</li> <li>Call a physician if irritation develops or persists.</li> <li>Wash contaminated clothing before re-use.</li> </ul>
In case of eye contact	: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Protect unharmed eye.
If swallowed	<ul> <li>If swallowed, call a poison control center or doctor immediately.</li> <li>Do NOT induce vomiting.</li> <li>If victim is fully conscious, give a cupful of water.</li> <li>If possible drink milk afterwards.</li> </ul>

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.



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Specific extinguishing methods Further information	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Special protective equipment for fire-fighters	Wear an approved positive pressure self-contained breathir apparatus in addition to standard fire fighting gear.	ng

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures		Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material. Shovel into suitable container for disposal.

## SECTION 7. HANDLING AND STORAGE

Local/Total ventilation	: Use only with adequate ventilation.
Advice on safe handling	: Wear personal protective equipment. Do not get on skin or clothing. Use only in an area equipped with a safety shower.
Conditions for safe storage	: Keep containers tightly closed in a dry, cool and well- ventilated place.
Materials to avoid	: No special restrictions on storage with other products.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
calcium carbonate	471-34-1	PEL (Total dust)	10 mg/m3	CAL PEL



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		PEL (respirable dust fraction)	5 mg/m3	CAL PEL
kaolin	1332-58-7	TWA (Respirable particulate matter)	2 mg/m3	ACGIH
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total)	10 mg/m3	OSHA P0
		TWA (Respirable fraction)	5 mg/m3	OSHA P0
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

Personal protective equipment				
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.			
Filter type	: Combined particulates and organic vapor type			
Hand protection				
Material	: butyl-rubber			
Eye protection	: Safety goggles Face-shield Ensure that eyewash stations and safety showers are close to the workstation location.			
Skin and body protection	: Long sleeved clothing Chemical resistant apron			
Protective measures	: Avoid contact with skin.			
Hygiene measures	: Avoid contact with skin, eyes and clothing.			



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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Color Odor Odor Threshold		liquid white characteristic No data available
Melting point/freezing point	:	is not determined
Boiling point/boiling range	:	is not determined
Evaporation rate Flammability (solid, gas)	:	is not determined Not classified as a flammability hazard
Upper explosion limit	:	Upper flammability limit is not determined
Lower explosion limit	:	Lower flammability limit is not determined
Density Solubility(ies)	:	1.47 g/cm3
Water solubility	:	is not determined
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	is not determined
Viscosity Viscosity, kinematic	:	is not determined

## SECTION 10. STABILITY AND REACTIVITY

Chemical stability	:	The product is chemically stable.
Hazardous decomposition products	:	Stable under normal conditions.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

No data available

### Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation



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#### No data available

### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### **Reproductive toxicity**

No data available

#### STOT-single exposure

No data available

### STOT-repeated exposure

No data available

#### Aspiration toxicity

No data available

### **SECTION 12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

No data available

#### Persistence and degradability

No data available Bioaccumulative potential

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues

: To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous



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Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

## **SECTION 14. TRANSPORT INFORMATION**

Special precautions for user

Not applicable

### **Domestic regulation**

**49 CFR** Not regulated as a dangerous good

### **International Regulations**

#### UNRTDG

Not regulated as a dangerous good

**IATA-DGR** Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### **SECTION 15. REGULATORY INFORMATION**

SARA 311/312 Hazards	:	No SARA Hazards
SARA 302	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.



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## **Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

## **US State Regulations**

California Prop 65 : Please contact Supplier for more information.

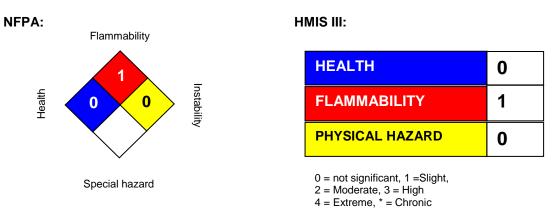
### The ingredients of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL Inventories LegendTSCA (USA), DSL (Canada), REACH(Europe), AICS (Australia), NZIOC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

## **SECTION 16. OTHER INFORMATION**

Prepared by: Global Regulatory Department - phone: 1-651-236-5842 - email: msds.request@hbfuller.com

### **Further information**



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