ROLASERIT® PB01akaTPU01, mProTPUMaterial-No.Revision date:24.05.2019Version1.02 ENPrint date:09.03.2021	SAFETY DAT	<b>FA SHEET</b>	EG No. 1272/ Annex II	2008 (REACH),
		PB01	•	
	Version	1.02 EN	Print date:	09.03.2021

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name	:	ROLASERIT <sup>®</sup> PB01 aka TPU01, mProTPU
Company	:	<b>AM POLYMERS GmbH</b> Hanns-Martin-Schleyer-Straße 9e D-47877 Willich
Telephone	:	+49 (0) 2154/ 50 292 10
Telefax	:	+49 (0) 2154/ 50 292 08
Email address	:	info@am-polymers.de
Emergency phone no.	:	+49 (0) 2154/ 50 292 10
Use of the substance / preparation		<b>Additive Manufacturing</b> Please call us at the above telephone number to clarify further uses. We will connect you with the Applications Engineering staff who can help you.

# 2. COMPOSITION/ INFORMATION ON INGREDIENTS

## **Chemical Character:**

**Product information** 

Polymer based on Polyurethane, Stabilizers and Additives in form of powder

According to GHS not restricted (EG No. 1272/2008).

#### Other information

This product does not contain any substance which can be dangerous for the health or the environment, with exposure limits in the working place. It does not contain any persistent bio accumulative or toxic substance nor very persistent or very bio accumulative. The product is under the ECHA-List not mentioned as forbidden substance.

## 3. HAZARD IDENTIFICATION

Does not contain hazardous products (GHS / EG No. 1272/2008).

# 4. FIRST AID MEASURES

#### Inhalation

In general: No effects caused.

Recommendation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Ingestion

In general: No evidence of adverse effects.

Recommendation: Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities

SAFETY DAT	<b>A SHEET</b>	EG No. 1272/ Annex II	2008 (REACH),		
<b>ROLASERIT®</b>	PB01 aka	TPU01, mPro	oTPU		
Material-No.		Revision date:	24.05.2019		AM Po
Version	1.02 EN	Print date:	09.03.2021	•••	
		Page	2 / 6		

of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Skin contact

## In general: No adverse effects caused.

Recommendation: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Eye contact

In general: Physical elimination in case of product in the eyes.

Recommendation: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

## **Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training.

## Notes to physician

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# 5. FIRE-FIGHTING MEASURES

# 5.1. Extinguishing media:

Water spray, carbon dioxide, foam. Direct large water flows should not be applied. Work against wind direction. Adequate breathing equipment should be worn. Carbon monoxide is produced by burning.

# 5.2. Special exposure hazards

Carbon monoxide, carbon dioxide, hydrogencyanide, NOx, Isocyanate. Beforehand mentioned substance groups can be exposed by burning.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

# 5.3. Hazardous combustion products

Decomposition products may include the following materials: carbon oxides Under certain fire conditions, traces of other toxic products may occur.

# 5.4. Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# 5.5. Remark

Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

SAFETY DA	TA SHEET	EG No. 1272/ Annex II	2008 (REACH),		
ROLASERIT <sup>®</sup> Material-No.	° PB01	aka TPU01, mP Revision date:	roTPU 24.05.2019		<b>AM Polymers</b>
Version	1.02 EN	Print date: Page	09.03.2021 3 / 6	•••	, e. <b>j</b> e.

# 6. ACCIDENTAL RELEASE MEASURES

Sweep up with mechanical means and dispose of it as a solid, harmless product.

### Powder:

### Personal precautions

In case product dust is released: Dust mask

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

### **Environmental precautions**

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

### Large spill

Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

#### Small spill

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

# 7. HANDLING AND STORAGE

#### Handling

Static electricity should be avoided when handling product in solution form. In case of spillage, sweep up, so as to avoid possible risks of slipping. Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Storage

Keep in well-closed containers and at a temperature below 25°C.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Never stack pallets more than two high to prevent the risk of them falling over.

#### Packaging materials

**Recommended** Use original container.

SAFETY DA	TA SHEET	EG No. 1272/ Annex II	2008 (REACH),		
ROLASERIT <sup>®</sup> Material-No.	<sup>»</sup> PB01	aka TPU01, m Revision date:	<b>ProTPU</b> 24.05.2019		<b>AM</b> Polymers
Version	1.02 EN	Print date: Page	09.03.2021 4 / 6	•••	,

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## Components with workplace control parameters

Exposure limit values: No exposure limit value known.

### **Recommended monitoring**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

## **Exposure controls**

### **Occupational exposure controls**

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

### **Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## **Respiratory protection**

No respiratory protection requested.

Recommendation: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Dust-protection mask P2

## Hand protection

No hand protection requested.

## Powder:

The wearing of protective gloves is not required if the powder in question is handled at room temperature. Protective heat-insulating gloves are to be used during thermal processing.

Any areas of skin covered with dust must be washed immediately with soap and water as the powder draws out natural moisture from the skin.

Use barrier cream regularly.

## Eye protection

No eye protection requested.

Recommendation: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

SAFETY D	ATA SHEET	EG No. 1272/ Annex II	2008 (REACH),	
ROLASERI	T <sup>®</sup> PB01	aka TPU01,	mProTPU	
Material-No.		Revision date:	24.05.2019	<b>AM Polymers</b>
Version	1.02 EN	Print date:	09.03.2021	
		Page	5 / 6	

### **Skin protection**

No Skin protection requested.

Recommendation: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b> Form/ physical state Colour Odour	Solid Powder White to semi transparent Hardly noticeable
Change of state of	
Melting point/ range:	100 – 120 °C (KOFLER) / softening range: 80 °C (KOFLER)
Explosive limits:	
- lower limit	not applicable
- upper limit	not applicable
Explosive properties (Powder):	Dusts can form explosive mixtures with air. Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.
Further information Other information	The range of values given complies with the variation range of the product group. The specific physical chemical data can be read in the product information.

## **10. STABILITY AND REACTIVITY**

Stable product, no decomposition occurs, provided storage and handling are correct. Conditions to be avoided: Thermal decomposition: > 200° C

Development of flammable gases / vapors. Dangerous decomposition products: Toxic gases and vapors such as carbon monoxide, carbon dioxide, nitrogen oxide.

# 11. TOXICOLOGICAL INFORMATION

Inhalation:No adverse effects are causeEye and skin contact:Eye contact may cause irritation. A continued contact with the skin may cause dermatitis.Ingestion:Effects are similar to those caused by the ingestion of any solid, non hazardous product.

SAFETY D	ATA SHEET	EG No. 1272/ Annex II	2008 (REACH),		
ROLASERI	T <sup>®</sup> PB01	aka TPU01, I			
Material-No. Version	1.02 FN	Revision date: Print date:	24.05.2019 09.03.2021		<b>AM Polymers</b>
VEISION	1.02 EN	Philit date: Page	6 / 6	••	

## 12. ECOLOGICAL INFORMATION

Follow local regulation for non-hazardous plastic materials.

# **13. DISPOSAL CONSIDERATIONS**

Follow local regulation under 6 and 12.

## **14. TRANSPORT INFORMATION**

No special cares requested, as it is a non-hazardous product.

UN/NA Code	N/A
ADR ADNR RID IATA IMDG DOT	not restricted not restricted not restricted not restricted not restricted not restricted

# **15. REGULATORY INFORMATION**

No special labeling required.

## **16. OTHER INFORMATION**

The content and format of this material safety data sheet follows Directive n°91/155/CEE issued by the European Commission.

The mentioned data are in accordance with our present knowledge and no warranty of the properties is made herein.

The receiver of our product is directly liable for the fulfillment corresponding regulations and norms.