



# MATERIAL SAFETY DATA SHEET

PUR 85A

1730 NE Miller Street  
McMinnville, OR 97128  
(503) 434-5561

---

## Product and Company Identification

---

Freelin-Wade Company  
503-434-5561

**Emergency Phone**  
1-800-424-9300

---

## SECTION I - Chemical Product Identification

---

**Product Name**

85A Durometer Polyurethane

**Product Code**

PUR85A

**Chemical Family**

Polyurethane

**Synonyms**

Thermoplastic Polyurethane Elastomer

---

## SECTION II - Hazard Identification

---

**Emergency Overview**

**CAUTION!** Under hot melt processing conditions, wear personal protective equipment to prevent thermal burns. Use with local exhaust ventilation.

**State of matter**

Solid

**Colour**

Translucent

**Odour**

Odourless

**Potential Health Effects**

**Primary Routes of Exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute Toxicity**

Inhalation of particulates may cause respiratory tract irritation. Ingestion may cause gastrointestinal disturbances.

**Irritation / Corrosion**

Irritating to eyes and skin.

**Assessment other acute effects**

Based on the available information there is no specific target organ toxicity to be expected after a single exposure

**Sensitization**

The chemical structure does not suggest a sensitizing effect.

PUR85A

**Chronic Toxicity**

**Carcinogenicity**

The chemical structure does not suggest a specific alert for such an effect.

**Repeated dose toxicity**

No known chronic effects.

**Reproductive toxicity**

The chemical structure does not suggest such an effect.

**Teratogenicity**

The chemical structure does not suggest a specific alert for such an effect.

**Genotoxicity**

The chemical structure does not suggest such an effect.

**Medical conditions aggravated by overexposure**

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance / product.

**Signs and symptoms of overexposure**

No significant reaction of the human body to the product known.

No hazards anticipated.

**Potential environmental effects**

**Aquatic Toxicity**

There is a high probability that the product is not acutely harmful to aquatic organisms.

**Degradation / environmental fate**

Poorly biodegradable.

---

### **SECTION III – Composition / Information on Ingredients**

---

<b>CAS Number</b>	<b>Content (W/W)</b>	<b>Chemical Name</b>
	100.0%	Thermoplastic Urethane

---

### **SECTION IV - First Aid Measures**

---

**General Advice**

Remove contaminated clothing.

**If Inhaled**

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

**If on Skin**

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention. Skin contact with hot molten substance / product may cause thermal burns.

**If in Eyes**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

**If swallowed**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

**Note to physician**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## **SECTION V - Fire Fighting Measures**

---

<b>Flash Point</b>	>300°C
<b>Auto Ignition</b>	Not applicable
<b>Lower explosion limit</b>	Not determined
<b>Flammability</b>	Product is combustible
<b>Self-ignition temperature</b>	Not self-igniting
<b>Suitable Extinguishing Media</b>	
Water spray, dry powder, carbon dioxide, foam	
<b>Hazards During Fire Fighting</b>	
No particular hazards known.	
<b>Protective Equipment for Fire Fighting</b>	
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.	
<b>Further Information</b>	
In case of fire and / or explosion, do not breathe fumes.	

---

---

## **SECTION VI - Accidental Release Measures**

---

<b>Personal precautions</b>
No special precautions necessary.
<b>Environmental precautions</b>
No special precautions necessary.
<b>Cleanup</b>
Spills should be contained and placed in suitable containers for disposal.

---

---

## **SECTION VII - Handling and Storage**

---

<b>Handling</b>
<b>General Advice</b>
Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of processing machines.
<b>Protection against fire and explosion</b>
No explosion proofing necessary.
<b>Storage</b>
<b>General Advice</b>
Avoid extreme heat. Avoid deposition of dust.
<b>Storage incompatibility</b>
General advice: Segregate from foods and animal feeds.
<b>Storage stability</b>
Protect against moisture.

---

---

## **SECTION VIII – Exposure Controls / Personal Protection**

---

<b>Advice on System Design</b>
Provide local exhaust ventilation to control dust.

PUR85A

### **Personal Protective Equipment**

#### **Respiratory Protection**

Wear a NIOSH certified (or equivalent) organic vapour / particulate respirator as needed.

#### **Hand Protection**

Wear gloves to prevent contact during mechanical processing and /or hot melt conditions.

#### **Eye Protection**

Wear splash goggles to protect from hot molten substance / product.

#### **General Safety and Hygiene Measures**

Wear protective clothing to prevent contact during mechanical processing and / or hot melt conditions. Avoid inhalation of dust. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

---

## **SECTION IX - Physical and Chemical Properties**

---

<b>Form</b>	Pellets
<b>Odour</b>	Odourless
<b>Colour</b>	Translucent
<b>pH value</b>	Not applicable
<b>Melting point</b>	150 - 230°C
<b>Boiling point</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Relative density</b>	1.12 – 1.20
<b>Bulk density</b>	500 – 700 kg.m3 (20°C)
<b>Partitioning coefficient n-octanol/water (log Pow)</b>	Not applicable
<b>Viscosity, dynamic</b>	Not applicable
<b>Solubility in water</b>	Insoluble

---

## **SECTION X - Stability and Reactivity**

---

#### **Conditions to Avoid**

No conditions known that should be avoided.

#### **Substances to Avoid**

No substances known that should be avoided.

#### **Hazardous reactions**

The product is chemically stable.

No hazardous reactions if stored and handled as prescribed / indicated.

#### **Decomposition Products**

Carbon monoxide; carbon dioxide; hydrogen cyanide.

Hazardous decomposition products:

#### **Thermal decomposition**

No decomposition if stored and handled as prescribed/indicated.

>230°C

Thermal decomposition above the indicated temperature is possible.

Prolonged thermal loading can result in products of degradation being given off.

#### **Corrosion to Metals**

No corrosive effect on metal.

#### **Oxidizing properties**

Not an oxidizer.



---

---

## Section XVI - Other Information

---

**Recommended use: Polymer**

Suitable for use in industrial sector: plastics processing industry;

<b>HMIS III RATING</b>	Health	Flammability	Physical hazard
	1	0	0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicate extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

**Approval Date**

5/2012

---

Freelin-Wade believes that the information and recommendations contained herein (including data and statements) are accurate as of the data hereof. **NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OR MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION CONTAINED HEREIN.** The information provided herein relates only to the specific product designated and may not be valid where such product is used in the combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Freelin-Wade, Freelin-Wade expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

---