

# Wellman Engineering Resins

## MATERIAL SAFETY DATA SHEET

Forms published by ChemSW (707)864-0845

### Section 1. Chemical Product and Company Identification

Product Code(s)

**G33-BK10**

Product Name

**PIRAMID™ Nylon**

Manufacturer's Name

**Wellman Engineering Resins**

Emergency Telephone Number

**800-424-9300**

Address (Number, Street, City, State, and ZIP Code)

**520 Kingsburg Highway**

Telephone Number For Information

**800-821-6022**

P.O. Drawer 188

Date Prepared

**March 3, 2009**

Johnsonville, SC 29555-0188

Signature of Preparer (optional)

### Section 2. Composition / Information on Ingredients

Component	CAS Registry #	wt. %	Exposure Limits	
			ACGIH TLV	OSHA PEL
Nylon (polyamide) polymer resin	32131-17-2	> 50	None Established	None Established
Glass Reinforcement	65997-17-3	5 – 50	5 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Non-Regulated Toughener	Not Applicable	0 - 20	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Non-Regulated Colorants, Stabilizers, Lubricants	Not Applicable	< 8	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Carbon Black	1333-86-4	0 – 2.5	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>
Titanium Dioxide	13463-67-7	0 – 1	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Polytetrafluoroethylene	9002-84-0	< 25	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

### Section 3. Hazards Identification

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#### EMERGENCY OVERVIEW

This product, as shipped is not considered hazardous as defined by the OSHA Hazard Communication Standard 29 CFR 1910.12

Heating the polymer near or above its melting point (500°F), such as in injection molding operations, may release small amounts of organic decomposition products such as acid fumes, toxic oxides of nitrogen, amine type fumes, and ammonia.

Burning the polymer may produce the same decomposition products and dense smoke.

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#### POTENTIAL HEALTH EFFECTS:

##### EYE CONTACT:

As a solid the same as other nuisance dusts and powders.

Contact with viscous melt >500°F will cause severe burns; exposure to decomposition fumes may cause eye irritation.

##### INHALATION:

As a solid these nylon resins are not likely to be hazardous by inhalation.

Dizziness and nausea may occur if fumes from molten or burning polymer are inhaled.

##### SKIN CONTACT:

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As a solid no effect, nylon resins are normally not irritating to the skin.  
Contact with the viscous melt (>500°F) will cause severe skin and body burns.

### INGESTION:

Solid nylon polymer presents no problem since it is insoluble in body fluids and biologically inert.

### CHRONIC EFFECTS / CARCINOGENICITY:

None of the components in these materials are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

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## Section 4. First Aid Measures

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### INHALATION:

Remove to fresh air and get medical attention if dizziness or nausea occurs.

### EYE CONTACT:

No specific treatment for exposure under normal conditions. Get medical attention if irritation persists.  
For contact with molten polymer get immediate medical attention.

### SKIN CONTACT:

No specific treatment under normal conditions as nylon is not irritating to the skin.  
For contact with molten polymer get immediate medical attention.

### INGESTION:

No specific treatment since nylon polymer is biologically inert. Seek medical attentions and treat as symptomatic.

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## Section 5. Fire Fighting Measures

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### FLAMMABLE PROPERTIES:

FLASH POINT: Not determined for solid product.

METHOD USED: NA

### FLAMMABLE LIMITS

LFL: NA

UFL: NA

### EXTINGUISHING MEDIA:

Water Spray, Foam, Dry Chemical, CO<sub>2</sub>.

### FIRE & EXPLOSION HAZARDS:

Accumulation of dust from grinding or machining operations could present a fire hazard.

### FIRE FIGHTING INSTRUCTIONS:

Keep personnel removed and away from fire.

### FIRE FIGHTING EQUIPMENT:

Wear self-contained breathing apparatus, MSHA/NIOSH approved (or equivalent) and full protective gear.

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## Section 6. Accidental Release Measures

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No protective measure required unless the polymer is involved in a fire situation. See section 5 above.

Spilled pellets are a slip hazard, contain and vacuum or sweep up material for salvage or disposal.

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## Section 7. Handling and Storage

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Store material in original packing or suitable containers under dry conditions in accordance with good material handling practices. Keep containers closed to prevent contamination and moisture pick-up.

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## Section 8. Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS:

Good general ventilation should be sufficient to control normal airborne levels. Add local exhaust ventilation when handling molten polymer to control vapors.

### RESPIRATORY PROTECTION:

None should be needed for normal working operations.

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## SKIN PROTECTION:

For solid materials normal good industrial hygiene practice to minimize skin contact.

For working with potential contact with molten material use heat resistant gloves with sleeve protection for arms and face masks are recommended for eye and face protection.

## EYE PROTECTION:

Wear safety glasses or goggles for all operations. When working with molten material ensure protection from splashes.

## EXPOSURE GUIDELINE (S):

As a nuisance dust: TLV 10 mg/m<sup>3</sup>  
PEL 15 mg/m<sup>3</sup>

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## Section 9. Physical and chemical Properties

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APPEARANCE:	Cylindrical Pellets	PHYSICAL STATE:	Solid
BOILING POINT:	Not applicable	SOLUBILITY IN WATER:	Insoluble
EVAPORATION RATE:	Not applicable	SPECIFIC GRAVITY:	
FREEZING POINT:	NA	VAPOR DENSITY:	NA
MELTING POINT:	500°F	VAPOR PRESSURE:	NA
MOLECULAR WEIGHT:	NA	VISCOSITY:	NA
ODOR:	Slight	% VOLATILE:	0.5% max at 220°F
PH:	NA		

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## Section 10. Stability and Reactivity

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### CHEMICAL STABILITY:

Stable. Temperatures above 650°F will cause decomposition in the presence of oxygen.

### INCOMPATIBILITY:

Incompatible or attacked by concentrated acids, phenols and oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Organic decomposition products such as acrid fumes, toxic oxides of nitrogen, amine type fumes, ammonia, carbon monoxide, and carbon dioxide.

### HAZARDOUS POLYMERIZATION:

Will not occur.

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## Section 11. Toxicological Information

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**EYE:** Mild eye irritation can be caused by glass fiber.

**SKIN:** Nylon is not a skin irritant in tests with animals.

**INGESTION:** Ingestion in high doses may cause decreased body weight. Long-term exposure caused no significant toxicological affects in animals.

**INHALATION:** Glass fiber has caused an inflammatory response in mice after instillation.

### SUBCHRONIC:

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## **CHRONIC / CARCINOGENICITY:**

Tests in some animals with glass fiber has demonstrated carcinogenic activity.

## **TERATOLOGY:**

## **REPRODUCTION:**

## **MUTAGENICITY:**

## **SENSITIZATION:**

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## **Section 12. Ecological Information**

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### **ECOTOXICOLOGICAL INFORMATION:**

Nylon polymer is non-toxic. Nylon pellets should be kept out of waterways and other locations where they could be ingested by wildlife and eventually fill the stomach of an animal.

### **DISTRIBUTION:**

Pellets will flow and fall easily from damaged packages, leaks in air conveying lines and bulk containers such as silos.

### **CHEMICAL FATE INFORMATION:**

Nylon polymer will not degrade biologically except at an infinitesimal rate and so will remain in place until cleaned up.

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## Section 13. Disposal Considerations

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Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State / Provincial and local regulations.

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## Section 14. Transport Information (Not meant to be all inclusive)

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D.O.T. SHIPPING NAME:	Not regulated
TECHNICAL SHIPPING NAME:	Canada
D.O.T. HAZARD CLASS:	TDG Class: Not regulated
U.N. / N.A. NUMBER:	
PRODUCT RQ (LBS):	International Civil Aviation Organization
D.O.T. LABEL:	ICAO Class: Not regulated
D.O.T. PLACARD:	
FREIGHT CLASS BULK:	International Maritime Dangerous Goods
FREIGHT CLASS PACKAGE:	IMDG Class: Not Regulated
PRODUCT LABEL:	

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## Section 15. Regulatory Information (Not meant to be all inclusive – selected regulation represented)

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OSHA STATUS:

TSCA STATUS: In compliance with TSCA Inventory requirements for commercial purposes.

CERCLA REPORTABLE QUANTITY:

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES:

SECTION 311/312 HAZARDOUS CATEGORIES:

SECTION 313 TOXIC CHEMICALS:

RCRA STATUS:

CALIFORNIA PROPOSITION 65:

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## Section 16. Other Information

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MSDS STATUS:

The data in this Material Safety Data Sheet relates only to the specific materials designated and does not relate to any other material.