



# Polifil® Nylon 6

## SAFETY DATA SHEET (SDS)

The Thermoplastics You Need. **The Service You Deserve.**

### Section 1. Product and Company Identification

Product Name/ Trade Name	Natural Polifil® Nylon 6		
Product Code(s):	Polifil® 930L, 936L		
Recommended Use:	Compounded resin for molding		
Restrictions on Use:	None identified		
Manufacture:	The Plastics Group of America 1112 River Street Woonsocket, RI 02895-1825 Website: www.plasticsgroup.com	In Case of Emergency:	Call (401) 767-2700 or Email sds@plasticsgroup.com
		Information:	Call (401) 767-2700 or Email sds@plasticsgroup.com

### Section 2. Hazard Identification

GHS Product Classification:	Not classified
GHS Label Elements:	Not applicable
Other Hazards:	Not applicable

### Section 3. Composition / Information on Ingredients

Name	CAS#	% by Weight
1. Polyamide Resin (Nylon 6)	25038-54-4	100%

### Section 4. First Aid Measures

Inhalation:	Dust and process vapors may be irritating to the nose, throat and respiratory tract. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get Medical attention.
Eyes:	Dust, fines and process vapors may irritate the eyes. Immediately flush eyes with water for at least 15 minutes. Get medical attention.
Skin:	Exposure to molten resin may cause thermal burns. If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get Medical attention.
Ingestion:	No adverse health effects expected from ingestion.

### Section 5. Fire-Fighting Measures

Suitable Extinguishing Methods:	Dry Chemical, Water Spray, Foam, Carbon Dioxide. Avoid using direct streams of water on molten burning material
Unsuitable Extinguishing Methods:	None known
Hazards During Fire-fighting:	Carbon monoxide, carbon dioxide, original monomer other hydrocarbon oxidation products include
Protective Equipment:	Wear self-contained breathing apparatus and protective suit.

## Section 6. Accidental Release Measures

Personal Precautions: See Section 8 – Exposure Controls / Personal Protection

Environmental Precautions: Discharge into the environment must be avoided.

### Methods and Materials for Containment and Cleaning Up

Land Spill: Spilled material should be swept up and discarded. Comply with applicable federal, state and local regulations.

Water Spill: Notify local authorities if spilled in waterway or sewer. Skim from surface of water if possible.

Waste Disposal: Reclaim where possible. Dispose of in accordance with local and state regulations. This is not an RCRA hazardous waste.

## Section 7. Handling and Storage

1. Keep away from sparks heat and flame.

2. This product may react with strong oxidizing agents and should not be stored near such materials.

3. Store boxes and bags of material in areas protected with automatic sprinklers. Use proper grounding procedures.

4. Inspect handling system regularly for possible accumulation of fines. Fines can present an explosive hazard when exposed to heat, sparks and open flames.

## Section 8. Exposure Controls / Personal Protection

### Exposure Limits

1. Effects of Acute Exposures: None determined

2. Effects of Chronic Over Exposure: None determined

3. OSHA Permissible Exposure Limits: Respirable Dust - Not established  
Total Dust - Not established

4. Carcinogen Potential:

- National Toxicology Program: Not listed
- I.A.R.C. Monograph: Not listed
- OSHA: Not listed

### Engineering Controls

For molten materials: Provide mechanical ventilation; in general such ventilation should be provided at compounding/ converting areas and at fabricating/ filling work stations where the material is heated. Local exhaust ventilation should be used over and in the vicinity of machinery involved in handling the molten material.

### Individual Protection Measures, Personal Protective Equipment (PPE)

Skin: Wear gloves when handling the material.

Ventilation: Adequate ventilation is recommended to minimize accumulation of fines or vapors during processing and handling.

Respiratory: Where exposure to nuisance dust may exceed acceptable levels, use NIOSH/MSHA approved respiratory protection equipment.

Eyes and Face: Wear safety glasses, face shield or chemical goggles to avoid getting material in the eyes during bulk handling. Eyewash fountains and safety showers should be easily accessible.

Protective Clothing: When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over skin to prevent contact.

Other Measures: Follow normal personal hygiene and good housekeeping practices.

## Section 9. Physical and Chemical Properties

Appearance:	Opaque to white pellet, solid	Vapor Pressure:	Not applicable
Odor:	Slight to none	Vapor Density:	Not applicable
pH:	Not applicable	Relative Density:	0.88 to 1.35 (g/cm <sup>3</sup> @ 23°C)
Melting Point / Freezing Point:	392 °F	Solubility (ies):	Insoluble in water
Boiling Point:	Not applicable	Partition Coefficient (N-Octanol/Water):	Not available
Flash Point:	>650 °F	Auto-Ignition Temperature:	>650 °F (estimated)
Evaporation Rate:	Not applicable	Decomposition temperature:	>600 °F
Flammability (solid,gas):	Not flammable	Viscosity:	Not applicable
Upper Explosive Limit:	UFL/UEL not available	Specific Gravity:	1.14 (g/cm <sup>3</sup> @ 23°C)
Lower Explosive Limit:	LFL/LEL not available	Percent Volatile:	Negligible

## Section 10. Stability Reactivity

Reactivity:	Strong oxidizing agents
Chemical Stability:	This material is considered a stable thermoplastic, with no chemical reactivity under normal ambient and anticipated handling conditions of temperature and pressure.
Possibility of Hazardous Reactions:	May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc. May react with free halogens.
Conditions to Avoid:	Avoid heating above the recommended processing temperature. DO NOT heat without adequate ventilation. Avoid storage or contact with strong oxidizing agents.
Incompatible Materials:	This material is Stable.
Hazardous Decomposition Products:	Small quantities of low molecular weight hydrocarbons, alcohols, aldehydes (incl. Formaldehyde), carboxylic acids, carbon oxides and ketones can be formed during thermal processing.
Combustion Products:	The following combustion products may be generated: Carbon Dioxide, Carbon Monoxide, water vapor, and Trace Volatile Organic Compounds.

## Section 11. Toxicological Information

### Irritating Effects

Eye Irritation :	Solid particles may cause transient irritation from mechanical abrasion.
Skin Irritation:	Not expected to cause skin irritation. Molten material may cause thermal burns.
Inhalation:	Not a likely route of exposure. Process fumes may cause irritation.
Ingestion:	May cause a choking hazard if swallowed.

### ADDITIONAL TOXICOLOGICAL INFORMATION

When used and handled according to specifications, the product does not have any harmful effects according to research and information provided by suppliers.

### Carcinogenic effect

International Agency for Research on Cancer (IARC): Group3 - NOT classifiable as to its carcinogenicity to humans.

## Section 12. Ecological Information

Eco-toxicity:	Toxicity to fish - No relevant studies identified.
Persistence and Degradability:	This material is not expected to be readily biodegradable.
Bio-accumulate Potential:	Product is not likely to accumulate in biological organisms.
Mobility in Soil:	This product has not been found to migrate through soils.
Other Adverse Effects:	This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

## Section 13. Disposal Considerations

### Disposal Methods

Product Recommendation:

1. Recycle (Reprocess) if product has not been contaminated so as to make it unsuitable for its intended use.
2. Disposal through controlled incineration or authorized waste dump in accordance with Local, State or Federal Regulations.

Uncleaned Packaging Recommendation:

1. Disposal must be done in accordance with Local, State or Federal Regulations.

## Section 14. Transportation Information

UN Number:	Not relevant
UN Proper Shipping Name:	Not relevant
<b>Transportation Hazard Class(es)</b>	
DOT:	Not regulated/classified
ADR / RID:	Not regulated/classified
IMDG:	Not regulated/classified
ICAO/IATA:	Not regulated/classified
HS-code (Customs Tariff code):	3908.10.00 00 Polyamide-6, -11, -12, -6, 6, -6, 9, -6, 10 or -6, 12. . .
Packing Group:	Not applicable
Environmental Hazards:	Not relevant
Transportation in Bulk (According to Annex II of MARPOL 73/78 and IBC Code):	Not relevant
Special Precautions for User:	No special precautions

## Section 15. Regulatory Information

This Material is not Hazardous by OSHA Hazardous Communication Standard 29 CFR 1910.1200

This Material is on the TSCA Inventory.

This Material is not subject to specific CERLA reporting requirements.

This Material is not subject to SARA 313 reporting requirements.

This Material is not subject to California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) reporting.

Canadian Environmental Protection Act (CEPA) All substances in this product are listed on the Canadian Domestic Substances List (DSL)

Canada – WHMIS This product does not meet WHMIS classification criteria.

Hazard Material Information System (USA) Health – 1 b, Flammability – 1, Reactivity - 0

## Section 16. Other Information

Notes: No additional information

### Legend

ACGIH:	American Conference of Governmental Industrial Hygienists
ADR/RID:	European dangerous goods transport road and rail regulations
CAS No:	Chemical Abstract Service Registry Number
CEPA:	Canadian Environmental Protection Act
DOT:	Department of Transportation (U.S.)
DSL:	Canadian Domestic Substances List
GHS:	Globally Harmonized System for the classification and labeling of chemical (United Nations)
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
IMDG code:	International Maritime Dangerous Goods code
LFL/LEL:	Lower Flammable Limit/Lower Explosive Limit
N/A:	Not applicable
N/E:	None established
NFPA:	National Fire Protection Association
OEL:	Occupational Exposure Limits
OSHA:	Occupational Safety & Health Administration (U.S.)
SDS:	Safety Data Sheet
STEL:	Short Term Exposure Limit
TDG:	Canadian Transportation of Dangerous Goods Act and Regulations
TWA:	Time Weighted Average (exposure for 8-hour workday)
UFL/UEL:	Upper Flammable Limit/Upper Explosive Limit
UN:	United Nations
U.S.:	United States

### Users Responsibility / Disclaimer of Liability

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

**Revision Date: 1-15-2014**