# **Safety Data Sheet**

Issue Date: 24-Mar-2016 Revision Date: 30-Mar-2016 Version 1

1. IDENTIFICATION

Product Identifier

Product Name Nylon 618

Other means of identification

**SDS #** TAU-004

Synonyms Nylon, Nylon 6, Nylon 6, Polyamide 6 with Polyamide 6 6, 6.

Recommended use of the chemical and restrictions on use

**Recommended Use**Mono Filament for FFF 3D Printing.

Details of the supplier of the safety data sheet

Supplier Address Taulman3D, LLC

N. Saint Peters Parkway Peters, MO 63376: 314-609-3549 mail: taulman@taulman3d.com://taulman3d.com

Emergency Telephone Number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

Emergency Overview Taulman3D Nylons are thermoplastic resins. In the solid state, they are not hazardous. During processing when converted to the molten state, normal precautions for the handling of hot, sticky, fluid melts should be observed.

Appearance White colored Physical state Solid Odor No noticeable odor

#### Classification

The classification and labeling information in this Safety Data Sheet should be viewed as provisional, as the product's ingredients and percentages are kept as a trade secret / proprietary. This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Nylon, Nylon 6, Nylon 6, Polyamide 6 with Polyamide 6 6,6.

Chemical Name	CAS No	Weight-%
Proprietary Nylon	Proprietary	90 - 100%

<sup>\*\*</sup>If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

# 4. FIRST-AID MEASURES

#### **First Aid Measures**

**General Advice** Provide this SDS to medical personnel for treatment.

**Eye Contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact** The following applies for mechanical or thermal contact when in the molten state:.

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse. If skin irritation occurs: Get medical

advice/attention.

**Inhalation** Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison

center if individual's condition declines or if symptoms persist.

**Ingestion** Not a likely route of exposure.

#### Most important symptoms and effects

Symptoms Dermatitis may occur. May cause irritation to the mucous membranes and upper respiratory

tract.

# Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

## Suitable Extinguishing Media

Water spray (fog). Foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media Not determined.

#### **Specific Hazards Arising from the Chemical**

Product is not flammable or combustible.

Hazardous Combustion Products Carbon monoxide. Hydrocarbons. Ammonia. Hydrogen cyanide.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

**Environmental precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See

Section 12, Ecological Information. See Section 12 for additional Ecological Information.

## Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so. If in molten state, soak up with an inert,

absorbent material.

Methods for Clean-Up Sweep up and shovel into suitable containers for disposal. For waste disposal, see section

13 of the SDS.

# 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on Safe Handling Taulman3D Nylons are thermoplastic resins. In the solid state, they are not hazardous.

During processing when converted to the molten state, normal precautions for the handling

of hot, sticky, fluid melts should be observed. Avoid breathing dusts.

## Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials**None known based on information supplied.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines No exposure limits noted for ingredient(s). The following information is given as general

guidance

#### Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses for good work practices when dealing with molten material. Refer to 29 CFR

1910.133 for eye and face protection regulations.

**Skin and Body Protection** Protective gloves required if in contact with molten material or newly molded polymer parts.

Protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection None required under normal use. Refer to 29 CFR 1910.134 for respiratory protection

requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Physical state Solid

AppearanceWhite coloredOdorNo noticeable odorColorWhiteOdor ThresholdNot determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not determined
Melting Point/Freezing Point 216 °C / 420 °F
Boiling Point/Boiling Range Not determined
Flash Point N.A.

Evaporation Rate Not determined Flammability (Solid, Gas) Not determined

Flammability Limits in Air

Upper Flammability Limits N.A.
Lower Flammability Limit N.A.

Vapor PressureNot determinedVapor DensityNot determinedRelative Density1.13-1.14Water SolubilityNot applicableSolubility in other solventsNot determinedPartition CoefficientNot determinedAuto-ignition TemperatureNot determined

**Decomposition Temperature** > 290.5 °C / >555 °F

Kinematic Viscosity

Dynamic Viscosity

Explosive Properties

Oxidizing Properties

Not determined

Not determined

Not determined

**Other Information** 

VOC Content (%) Nil

# 10. STABILITY AND REACTIVITY

#### Reactivity

Not reactive under normal conditions.

#### **Chemical Stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

## **Conditions to Avoid**

Temperatures over 555°F may result in thermal decomposition.

# **Incompatible Materials**

None known based on information supplied.

#### **Hazardous Decomposition Products**

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

**Product Information** 

**Eye Contact** May cause temporary irritation on eye contact.

**Skin Contact** Dust may cause dermatitis.

**Inhalation** Pellets are not respirable. Caprolactam dust and vapors evolved during normal processing

may be irritating to the respiratory tract if adequate ventilation is not provided.

**Ingestion** Not an expected route of exposure.

# Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

# Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## Persistence/Degradability

Not determined.

#### **Bioaccumulation**

Not determined.

# **Mobility**

Not determined

#### **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

# **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

**DOT** Not regulated

IATA Not regulated

IMDG Not regulated

# 15. REGULATORY INFORMATION

#### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Proprietary Nylon	Х	Х		Present	Х	Present	Х	Х

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### US Federal Regulations

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

## US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

# **16. OTHER INFORMATION**

**Health Hazards Special Hazards** NFPA **Flammability** Instability Not determined Not determined Not determined Not determined HMIS **Health Hazards Flammability Physical hazards Personal Protection** Not determined Not determined Not determined Not determined

Issue Date:24-Mar-2016Revision Date:30-Mar-2016Revision Note:New format

# **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**