

Material Safety Data Sheet

1. Chemical Product and Company Identification

Product Name: Ny Tuf/ Ny Pro **Other/Generic Names:** None

Product Use: Concrete Reinforcement

Manufacturer: ABC Polymer Industries

P.O. Box 580 Helena, Al 35080

www.abcpolymerindustries.com

For More Information Call: In Case of Emergency Call:

205.620.9889 205.620.9889

2. Composition/Information of Ingredients

Ingredient nameCAS NumberWeight %Nylon 6 (poly[imimo(1-oxo-1, 6-hexandediy)])25038-54-4>99Caprolactam105-60-2<1</td>

Trace impurities and additional material names not listed above may also appear in the regulatory information section (#15) towards the end of the MSDS. These materials may be listed for local "Right to Know" compliance and for other reasons.

3. Hazards Identification

Emergency overview: A bright fiber with no or slight odor. There are no health hazards for which first aid is required.

Potential Health Hazards

Nylon fiber is not hazardous. During thermal processing caprolactam monomer contained in the fiber can be released. Caprolactam can irritate the eyes, nose, throast, and skin at sufficiently high concentrations.

Skin: May cause mechanical irritation

Eyes: May cause mechanical irritation

Inhallation: Fibers are not respirable in this form. Respirable fibers may be generated from

mechanical action on fiber during some processing steps

Ingestion: Not a probable route of exposure.

Delayed effects: None

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

4. First Aid Measures

First aid is not required for fiber.

Skin: If irritation develops, flush skin iwth running water. If discomfort continues, obtain

medical attention.

Eyes: If irritation develops, flush eyes with running water. IF discomfort continues, obtain

medical attention.

Inhallation: If irritation develops from processing vapors, remove person to fresh air. If irritation

continues, obtain medical attention.

Ingestion: Not a probable route of exposure.

Advice to Physician: No specific treatment. Treat symptomatically.

5. Fire Fighting Measures

Flammable Properties

Flash Point: Not applicable Flash Point Method Not applicable

Autoignition temperature: Greater than 410 C (770 F)

Upper Flame Limit (volume % in air):

Lower Flame Limit (volume% in air):

Flame propagation rate (solids):

OSHA Flammability class:

Not applicable

Not applicable

Extinguishing Media:

All Standard agents may be used.

Unusual Fire and Explosioni Hazards:

None.

Special Fire Fighting Precautions/Instructions:

Wear self-contained breathing apparatus meeting 42 CRF part 84 standard. Avoid excessive inhalation of smoke or potential thermal products.

6. Accidental Release Meaures

In Case of Spill or Other Release: (Always wear recommended personal protective equipment.) Collect fiber and place it in a container for reuse, recycle, or disposal.

Spills and releases may have to be reported to Federal and/or local authorities. See the regulatory information section (#15) regarding reporting requirements.

7. Handling and Storage

Normal Handling: (Always wear recommended personal protective equipment.) Wear adequate personal protective equipment as determined necessary.

Storage Recommendations:

To maintain product quality, store in a cool, dry area

8. Exposure Controls/ Personal Protection

Engineering Controls:

Provide local exhaust (mechanical ventilation) as determined necessary to remove any dusts, mists, or vapors that may be generated.

Personal Protective Equipment

Skin Protection:

Wear gloves, arm protection, and adequate clothing to protect against fiber moving at high speed.

Eye protection:

Wear safety glasses with side shields as reccommended.

Respiratory Protection:

Us NIOSH- approved respiratory protection equipment if dusty contditions exist.

Additional Reccommendations:

None.

Exposure Guidelines (Guidlines exist for the following ingredients)

Ingredient Name ACGIG TLV OSHA PEL Other Limit

Caprolactam Dust: 1mg/ m³ TWA; Dust: 3mg/ m³ TWA None

Vapor: 5ppm, 23mg/m³ Vapor: 5ppm, 20mg/ m³ TWA; 10ppm, 46 mg/m³ TWA; 10ppm/ 40mg/m³

STEL STEL

- * =Limit established by ABC Polymer for internal Use.
- ** =Workplace Environment Exposure Level (AIHA).
- *** =Biological Exposure Index (ACGIH).

Other exposure limits for the decomposition products normally associated with product use are as follows:

Nylon 6 dusts should be considered as nuisance dusts: ACGH TLV-TWA of total dust = 10mg/m^3 ; OSHA PEL= 15mg/m^3

Nylon fibers are coated with finish oils. Textile processes may volatize portions of these finishes and produce an aerosol in the workplace. Ventilation is recommended to minimize exposure to such aero sols which should not exceed a concentration of 5mg/m³

9. Physical and Chemical Properties

Appearance: Light colored fiber with slight odor.

Physical State: Solid.

Molecular Weight: >15,000

Chemical Formula: [C6 H11 NO]x

Odor: Slight odor characteristic of a lubricant.

Specific Gravity (water=1.0): 1.12-1.14 Solubility in Water (weight%): Insoluble. PH: Not applicable. **Boiling Point:** Not applicable. **Melting Point:** Not applicable. Vapor Pressure: Not applicable. Not applicable Vapor Density (air=1.0): %Volailes: Not applicable

Flash Point: Not Applicable

(Flash point method and additional flammability data are found in Section 5.)

10. Stability and Reactivity

Normally Stable? (Contitions to Aviod):

Stable

Incompatibilities:

Avoid Strong mineral acids. Avoid exposure to open flame or temperature exceeding optimum recommended processing temperatures. Also avoid prolonged exposure to processing temperatures. Consult technical service personnel for recommended processing conditions.

Hazardous Decomposition Products:

Thermal breakdown products may include a complex mixture of organic and inorganic compounds including but not limited to simple hydocarbons, aldehydes, ketones, nitriles, inorganic oxides, trace amounts of hydrogen cyanide, and other materials depending upon specific temperature, time of exposure, and other immediate environmental factors

Hazardous Polymerization:

Will not occur.

11. Toxicalogical Information

Immediate (Acute) Effects:

LD50 (rat) = 3200 mg/kg. Fibers have been tested and determinded not to be irritants or to cause dermal irritation or contace allergic dermatitis.

Delayed (Subchronic and chornic) effects;

None Known.

Other Data:

None.

12. Ecological Information

Considered to be inert

13. Disposal considerations

RCRA

Is the unused product a RCRA hazardous waste if discarded? No. **If yes, the RCRA ID number is:** Not applicable

Other Disposal Considerations: The material as shipped is a non-hazardous organic solid. Diposal must comply with Federal, state and local laws when the material is discarded.

The Information offered here is for the product as shipped. Us and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the materical and alter the RCTA classification and the proper disposal method.

14. Transport Information

US DOT Proper Shipping Name:

US Dot Hazard Class:
US DOT ID Number:
Not regulated
Not applicable

For additional Information offered here is for the product as shipped. Us and/or alteration to the product such as mixing with other materials may singificalntly change the cahracteristics of the material and alter the RCTA classication and the proper disposal method.

15. Regulartory Information

Toxic Substances control ACT (TSCA)

TSCA Inventory Status: Material is on the TSCA Chemical Inventory.

Other TSCA Issues: None.

Sara Title III/Cercla

"Reportable Quantities" (RQs) and /or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

Ingredient name Sara/Cercla RQ (lb) Sara EHS TPQ (lb)

Caprolactam 5000 lb/24hr None

Spills/ releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-88802] and to your local Emergency Planning Committee.

Section 311 Hazard class: No ingredient listed in this section

Sara 313 Toxic Chemical

The following ingredients are SAFA 313 "Toxic Chemicals". CAS #'s and wt. % are found in section #2

Ingredient Name Comment

No ingredients listed in this section

State Right-To-KNow

In addition the ingredients found in section2, the following are listed for state right-to-know purposes:

Ingredient name Weight% Comment

No ingredients listed in this section

Additional Regulatory Information:

None

WHMIS Classification (Canada):

Not a controlled product.

Foreign Inventory Status:

Canadian DSL (Domestic Substances List)

EINECS (European Inventory of Existing Commercial Chemical Substances) (monomer)

16. Other Information

Changes to MSDS from previous issue date are due to the following:

Other Information: If the product is to be used for special application (e.g., the food industry, hygiene or the medical/sugical sector, please contact honeywell