



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 04-Mar-2019

Revision Date 11-Aug-2020

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** NYCAST® 6PA, NYCAST® 6PA NYLOIL®, NYCAST® 6PA FG, NYCAST® 6PA NYLOIL® FG, NYCAST® 6PA CP 6/12, NYCAST® 6PA SLX, NYCAST® 6PA Wax, NYCAST® 6PA NYLOIL® MDX

### Other means of identification

**Product Code(s)** CPNA; CPNY; DFGR; FGBC; FGBL; FGCR; FGOR; FGNY; FGRD; FGWX; FGYW; FLPU; NYBK; NYGN; NYNA; NYOR; NYRD; NYYW; OMBK; OMGY; SLPU; WXNA

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Industrial

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

Cast Nylons Limited  
4300 Hamann Parkway  
Willoughby, OH 44094  
T: 440-269-2300

### Emergency telephone number

**Emergency telephone** 440-269-2300

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Acute toxicity - Oral                            | Category 4  |
| Acute toxicity - Dermal                          | Category 4  |
| Acute toxicity - Inhalation (Dusts/Mists)        | Category 4  |
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |

### Hazards not otherwise classified (HNOC)

Not applicable.

### Label elements

#### **Warning**

#### **Hazard statements**

Harmful if swallowed.

Harmful in contact with skin.  
Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Specific treatment (see supplemental first aid instructions in this document)  
IF IN EYES: 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  
IF ON SKIN: Wash with plenty of water and soap  
Call a POISON CENTER or doctor if you feel unwell  
Take off contaminated clothing and wash it before reuse  
If skin irritation occurs: Get medical advice/attention  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

Harmful to aquatic life with long lasting effects.

- 16.435 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 25.415 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 30.415 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**3. Composition/information on ingredients**

**Substance**

Not applicable.

**Mixture**

| Chemical name         | CAS No   | Weight-% | Trade secret |
|-----------------------|----------|----------|--------------|
| .epsilon.-Caprolactam | 105-60-2 | 92-98    | *            |

|                         |           |      |   |
|-------------------------|-----------|------|---|
| Molybdenum (IV) sulfide | 1317-33-5 | 0-<3 | * |
|-------------------------|-----------|------|---|

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

### Description of first aid measures

|   |   |
|---|---|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.   |
| <b>Inhalation</b>                         | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. IF IN EYES:   |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water for at least 15 minutes. If symptoms persist, call a physician. IF ON SKIN:  |
| <b>Ingestion</b>                          | IF SWALLOWED: Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. Avoid breathing dust/fume/gas/mist/vapors/spray. |

### Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>               | Dry chemical, CO2, water spray or regular foam.                           |
| <b>Unsuitable extinguishing media</b>             | None known.   |
| <b>Specific hazards arising from the chemical</b> | Thermal decomposition can lead to release of irritating gases and vapors. |
| <b>Hazardous combustion products</b>              | Carbon oxides. Nitrogen oxides (NOx). Hydrogen cyanide.                   |
| <b>Explosion data</b>                             |   |
| <b>Sensitivity to mechanical impact</b>           | None.   |
| <b>Sensitivity to static discharge</b>            | None.   |

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not breathe dust.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep in a dry place. Keep away from Incompatible materials.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

| Chemical name                        | ACGIH TLV  | OSHA PEL   | NIOSH   |
|--------------------------------------|--|--|---|
| .epsilon.-Caprolactam<br>105-60-2    | TWA: 5 mg/m <sup>3</sup> inhalable fraction and vapor  | (vacated) TWA: 1 mg/m <sup>3</sup> dust<br>(vacated) TWA: 5 ppm vapor<br>(vacated) TWA: 20 mg/m <sup>3</sup> vapor<br>(vacated) STEL: 3 mg/m <sup>3</sup> dust<br>(vacated) STEL: 10 ppm vapor<br>(vacated) STEL: 40 mg/m <sup>3</sup> vapor | TWA: 1 mg/m <sup>3</sup> dust<br>TWA: 0.22 ppm vapor<br>TWA: 1 mg/m <sup>3</sup> vapor<br>STEL: 3 mg/m <sup>3</sup> dust<br>STEL: 0.66 ppm vapor<br>STEL: 3 mg/m <sup>3</sup> vapor |
| Molybdenum (IV) sulfide<br>1317-33-5 | TWA: 10 mg/m <sup>3</sup> Mo inhalable particulate matter<br>TWA: 3 mg/m <sup>3</sup> Mo respirable particulate matter | TWA: 15 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 10 mg/m <sup>3</sup> Mo   | IDLH: 5000 mg/m <sup>3</sup> Mo   |

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls**                      Showers  
    Eyewash stations  
    Ventilation systems.

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

**Eye/face protection**                      Wear safety glasses with side shields (or goggles).

**Hand protection**                              Wear suitable gloves. Impervious gloves.

**Skin and body protection**                      Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection**                      If respirable dusts are generated, respiratory protection may be needed.

**General hygiene considerations**                      Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**                                      Solid (compressed)  
**Physical state**                                      Solid  
**Color**    Natural color  
**Odor**    None  
**Odor threshold**                                      No data available

| <u>Property</u>                        | <u>Values</u>  | <u>Remarks • Method</u> |
|--|--|-------------------------|
| pH                                     | No data available  | None known              |
| Melting point / freezing point         | 210.000030040742 - 238.000034046174 °C / 410.00003604889 - 460.400040855408 °F |                         |
| Boiling point / boiling range          | No data available  | None known              |
| Flash point                            | No data available  | None known              |
| Evaporation rate                       | No data available  | None known              |
| Flammability (solid, gas)              | No data available  | None known              |
| Flammability Limit in Air              |  | None known              |
| Upper flammability or explosive limits | No data available  |                         |
| Lower flammability or explosive limits | No data available  |                         |
| Vapor pressure                         | No data available  | None known              |
| Vapor density                          | No data available  | None known              |
| Relative density                       | 1.15 - 1.17  |                         |
| Water solubility                       | Up to .?   |                         |
| Solubility(ies)                        | TFA: HFIP  |                         |
| Partition coefficient                  | No data available  | None known              |
| Autoignition temperature               | No data available  | None known              |
| Decomposition temperature              | No data available  | None known              |
| Kinematic viscosity                    | No data available  | None known              |
| Dynamic viscosity                      | No data available  | None known              |

**Other information**

**Explosive properties**                              No information available.

|                      |                           |
|----------------------|---------------------------|
| Oxidizing properties | No information available. |
| Softening point      | No information available  |
| Molecular weight     | No information available  |
| VOC Content (%)      | No information available  |
| Liquid Density       | No information available  |
| Bulk density         | No information available  |

## 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | None under normal use conditions.                       |
| Chemical stability                 | Stable under normal conditions.                         |
| Possibility of hazardous reactions | None under normal processing.                           |
| Conditions to avoid                | Temperatures above 210 °C / 410 °F.                     |
| Incompatible materials             | Strong acids. Strong oxidizing agents.                  |
| Hazardous decomposition products   | Carbon oxides. Nitrogen oxides (NOx). Hydrogen cyanide. |

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|              |  |
|--------------|--|
| Inhalation   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).                                     |
| Eye contact  | Specific test data for the substance or mixture is not available. Irritating to eyes. Causes serious eye irritation. (based on components).  |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).   |
| Ingestion    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). |

### Symptoms related to the physical, chemical and toxicological characteristics

|          |  |
|----------|--|
| Symptoms | Redness. May cause redness and tearing of the eyes. Coughing and/ or wheezing. |
|----------|--|

### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 1,478.34 mg/kg |
| ATEmix (dermal)               | 1,633.54 mg/kg |
| ATEmix (inhalation-dust/mist) | 1.67 mg/l      |

16.435 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
25.415 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
30.415 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Component Information**

| Chemical name                        | Oral LD50            | Dermal LD50             | Inhalation LC50                      |
|--------------------------------------|----------------------|-------------------------|--------------------------------------|
| .epsilon.-Caprolactam<br>105-60-2    | = 1210 mg/kg ( Rat ) | = 1438 mg/kg ( Rabbit ) | = 8.16 mg/L ( Rat ) 4 h              |
| Molybdenum (IV) sulfide<br>1317-33-5 | -                    | -                       | > 2820 mg/m <sup>3</sup> ( Rat ) 4 h |

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Irritating to skin.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

| Chemical name                     | ACGIH | IARC    | NTP | OSHA |
|-----------------------------------|-------|---------|-----|------|
| .epsilon.-Caprolactam<br>105-60-2 | -     | Group 3 | -   | -    |

**Reproductive toxicity** No information available.

**STOT - single exposure** May cause respiratory irritation.

**STOT - repeated exposure** No information available.

**Target organ effects** Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system. Central Vascular System (CVS).

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

**12. Ecological information**

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

| Chemical name                     | Algae/aquatic plants   | Fish   | Toxicity to microorganisms | Crustacea  |
|-----------------------------------|--|--|----------------------------|--|
| .epsilon.-Caprolactam<br>105-60-2 | EC50: =130mg/L (72h, Desmodesmus subspicatus) EC50: 4320 - 4800mg/L (72h, Pseudokirchneriella subcapitata) EC50: =160mg/L (96h, Desmodesmus subspicatus) | LC50: =1400mg/L (96h, Pimephales promelas) LC50: =930mg/L (96h, Lepomis macrochirus) | -                          | EC50: 828 - 2920mg/L (48h, Daphnia magna) EC50: >500mg/L (48h, Daphnia magna Straus) |

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

**Component Information**

| Chemical name                     | Partition coefficient |
|-----------------------------------|-----------------------|
| .epsilon.-Caprolactam<br>105-60-2 | -0.02                 |

**Other adverse effects** No information available.

### 13. Disposal considerations

#### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. Transport information

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

### 15. Regulatory information

#### International Inventories

**TSCA** Contact supplier for inventory compliance status.

#### **Legend:**

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

#### US Federal Regulations

##### **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.

##### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

##### **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).

##### **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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**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.

| Chemical name   | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| .epsilon.-Caprolactam<br>105-60-2   | X          | X             | X            |
| Molybdenum (IV) sulfide<br>1317-33-5  | -          | X             | -            |
| Phosphorodithioic acid,<br>O,O-di-C1-14-alkyl esters, zinc<br>salts<br>68649-42-3 | X          | -             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

|             |                         |                       |                           |   |
|-------------|-------------------------|-----------------------|---------------------------|---|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Physical and chemical properties</b> - |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X              |

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
Ceiling Maximum limit value \* Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set

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World Health Organization

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**Revision Note** SDS sections updated: 1.

**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**