ATTENTION: Branch Manager, Plant Manager, Hazard Communication Coordinator

SUBJECT: OSHA Hazard Communication Standard
Material Safety Data Sheet (MSDS)

The Occupational Safety and Health Administration’s Hazard Communication Standard (29 CFR 1910. 1200) requires a Material Safety Data Sheet for products that are used within SIC Codes 20-39.

Enclosed is the Material Safety Data Sheet dated January 1, 2007 that covers the following products from Cast Nylons, Ltd.:

- NYCAST® Type 6 cast nylon in assorted colors
- NYCAST® Type 6 MOS2 cast nylon
- NYCAST® Nyloil cast nylon
- NYCAST® CP cast nylon in assorted colors
- NYCAST® XHA Heat Stabilized Type 6 nylon
- NYCAST® Nyloil FG Food Grade cast nylon
- NYCAST® Nyloil MDX cast nylon
- NYCAST® 12 cast nylon (Type 12)
- NYCAST® RX/GX Solid Lube Filled

If additional copies are required, please contact us at the number above.

Sincerely,

CAST NYLONS LTD.

Jack Thorp
President
Encl.: Material Safety Data Sheet (MSDS)
1) CHEMICAL MANUFACTURER

Name: Cast Nylons Limited
Address: 4300 Hamann Parkway, Willoughby, Ohio 44094
Telephone No.: (440) 269-2300
Date: January 1, 2007

2) PRODUCT IDENTITY

PRODUCT NAMES: Nycast Type 6 Cast Nylon in assorted colors;
Nycast Type 6 MOS2, Nycast Nyloil, Nyloil-FG, and Nyloil-MDX
Cast Nylon; Nycast XHA, Nycast R-EX, and Nycast CP Cast Nylon in assorted colors.
(reg.TM in italics)

CHEMICAL NAMES/FORMULAS: Polycaprolactam \([\text{NH} (\text{CH}_2)_5 \text{CO}]_n\) + modifiers;
Poly (caprolactam + laurolactam \([\text{NH} (\text{CH}_2 X \text{CO}]_n\) + modifiers.

CAS REGISTRY NO.: Not Applicable
CHEMICAL DESCRIPTION: This semi-finished product is considered herein as a number of similar complex mixtures of nylon polymers formulated with performance modifiers and colorants. The major component is either type 6 nylon or type 6/12 nylon. The material is supplied cast into standard shapes such as sheet, rods, plates, tubes, and blocks. This MSDS applies to all of the NYCAST products.

3) PHYSICAL HAZARD OR HEALTH HAZARD INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CAS RN</th>
<th>WEIGHT %</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

IS ANY CHEMICAL PRESENT IN THIS PRODUCT AT A CONCENTRATION OF 0.1% OR MORE CLASSIFIED AS A CARCINOGEN BY NATIONAL TOXICOLOGY PROGRAM, INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, OR OSHA? NO

4) PHYSICAL DATA

FORM: Solid Plastic
BOILING/MELTING TEMPERATURE: 410-460°F approx.
VAPOR PRESSURE @ 70 Deg. F: negligible
EVAPORATION RATE (BUTYL ACETAL = 1): Negligible
SOLUBILITY IN WATER: Negligible
SPECIFIC GRAVITY (WATER=1): 1.15
APPEARANCE: Sheets blocks, tubes and rods weighing 3 to 800 lbs.
COLOR: Assorted colors
ODOR: None

5) FIRE AND EXPLOSIVE DATA

FLASH POINT: Not applicable
FLASH IGNITION TEMPERATURE: 750°F est.
FIRE AND EXPLOSION HAZARDS: Large molten masses may ignite spontaneously in air; water quenching of such masses is good practice. Combustion products can be oxides of nitrogen, carbon monoxide, carbon dioxide, etc.
EXTINGUISHING MEDIA: Water, carbon dioxide, foam, dry chemical
SPECIAL FIREFIGHTING INSTRUCTIONS: Wear self-contained breathing apparatus.

6) HAZARDOUS REACTIVITY

MATERIAL TO AVOID: Strong acids, strong oxidizing agents, certain salts
CONDITIONS TO AVOID: Temperatures above 400°F cause deformation, melting
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Oxides of nitrogen, carbon, ammonia, hydrogen, cyanide, aldehydes, ketones, etc.

7) HEALTH INFORMATION
ROUTE OF ENTRY
INHALATION (BREATHING): Bulk casting-no. Dusts, particles, and chips can be generated during machining operations on cast shapes. Inhalation of dust is possible; large particles could conceivably block air passages.
INGESTION (SWALLOWING): Bulk castings-no. Generated dust, particles, and chips could be swallowed.

ACUTE EFFECTS OF EXPOSURE
INHALATION: Mechanical obstruction
SKIN AND EYES: Mechanical irritation or scratching
CHRONIC EFFECTS OF EXPOSURE: None Known

EMERGENCY AND FIRST AID PROCEDURES
INHALATION: Use emergency first aid techniques to remove obstruction or to resume breathing and/or call for medical help immediately.
INGESTION: Use first aid techniques, including coughing, to remove obstruction and/or call for medical help.
SKIN CONTACT: Wash with soap and water, treat by first aid techniques.
EYE CONTACT: Wash eyes at the eye-wash station and/or get medical help.

8) PRECAUTIONS FOR SAFE HANDLING AND USE-----------------------------------------------
IF MATERIAL IS RELEASED OR SPILLED: Not applicable to bulk casting.
WASTE DISPOSAL METHOD: Dispose of in landfill in compliance with all federal, state, and local regulations.
HANDLING AND STORAGE: Handle heavier castings either with lifting equipment or sufficient manpower. Store in dry place away from water.
OTHER INSTRUCTIONS: Any other appropriate and necessary precautions as determined by specific manufacturing use or uses.

9) CONTROL MEASURES--------------------------------------------------------------------------
VENTILATION: General exhaust or local exhaust at machining area to keep dust below 15mg./cu.m. (OSHA TWA limit for nuisance dust).
RESPIRATORY PROTECTION: If dust generated in use (such as machining) exceeds the TWA of 15 mg.cu.m. wear a NIOSH approved dust mask.
EYE PROTECTION: Wear safety glasses or a face shield in workplace.
PROTECTIVE GLOVES: Wear gloves for gripping and to prevent scratches.
OTHER PROTECTIVE EQUIPMENT: As appropriate for the specific use.
HYGIENIC PRACTICES: Wash hands prior to eating, drinking, or smoking.
WORK PRACTICES: When handling heavy castings, use proper lifting techniques, e.g., lift slowly with legs in squat position.

10) REGULATORY AND HMIS INFORMATION--------------------------------------------------------
SARA 313 NOTIFICATION: This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.
HMIS HAZARD CODES: HO  F1  RO

NOTICE: Cast Nylons Limited manufactures nylon plastic products for use in the production of the products by industrial customers. Cast Nylons Limited usually has only limited information about the products of its customers and their methods of manufacture and use. Accordingly, Cast Nylons Limited makes no warranty, expressed or implied, as to the accuracy, completeness, or reliability of information herein except that such information is, to the best of Cast Nylons Limited’s knowledge and belief, accurate as of the data indicated.