SAFETY DATA SHEET (SDS)
MX Nylon (Nylon MXD6)

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: MX Nylon grades 6000, 6005
MX Nylon grades S6003LD, S6007, S6011, S6022, S6121

Other Identification: Polyamide MXD6, Nylon MXD6
Hexanedioic acid, polymer with 1,3-benzenedimethanamine

Recommended Use: Compounding, injection molding, film and sheet

Restrictions on Use: FDA has approved the use of certain MX-Nylon grades for indirect and direct food contact with specific food applications and conditions of use

Manufacturer: MGC Advanced Polymers, Inc.
1100 Port Walthall Drive
Colonial Heights, VA 23834
+1-804-520-7800

Emergency Contact: Inquiries +1-804-520-7800 (business hours)

SECTION 2 - HAZARD IDENTIFICATION

Classification: Non-Hazardous. No need for classification according to OSHA and GHS criteria for this product.

Signal Word: Not applicable, according to OSHA and GHS criteria for this product.

Hazard Statement: Not applicable, according to OSHA and GHS criteria for this product.

Pictograms: Not applicable, according to OSHA and GHS criteria for this product.

Precautionary statement(s): Not applicable, according to OSHA and GHS criteria for this product.

Hazards not otherwise classified: Product dust may be irritating to eyes, skin and respiratory system. Thermal decomposition can lead to release of irritating gases and vapors. The molten product can cause serious burns.
SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name: Hexanedioic acid, polymer with 1,3-benzenedimethanamine
Common name: MX Nylon, Polyamide MXD6, Nylon MXD6
CAS number: 25718-70-1
Impurities and stabilizing additives contributing to the classification of the substance: None

SECTION 4 - FIRST AID MEASURES

Inhalation: Breathing dust or vapors may be irritating to the nose, throat and respiratory tract. Remove to fresh air. Get medical attention if irritation develops or persists.
Skin contact: Wash off immediately with plenty of cool water. Use a mild soap if available. Get medical attention if irritation develops or persists. For contact with hot polymer, cool skin rapidly with cold water. Do not attempt to remove the material from the skin. Removal could result in additional tissue damage. Get medical attention.
Eye contact: Dust and process vapors may be irritating to the eyes. Flush with water for at least fifteen minutes. Get medical attention.
Ingestion: No adverse health effects are expected from ingestion.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, carbon dioxide, water spray and foam.
Unsuitable extinguishing media: None known.
Specific hazards arising from the chemical: This material is not easily ignited, but will burn if heated sufficiently. Finely divided polyamide dusts, when dispersed in air may pose a dust explosion hazard.
Hazardous of fire, explosion: - Overheating may result in release of formaldehyde, which may irritate the eyes, skin and respiratory tract.

Specific protective equipment or precautions for firefighters.: 

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Water should be used to keep fire-exposed containers cool.

Water, foam and dry chemical may cause damage to electrical equipment.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

General Precautions - Initiate company’s spill response procedures immediately. Keep personnel out of the affected area. Put on appropriate personal protective equipment. Do not touch or walk through spilled material.

Resin and Dust Release – Wear personal protective equipment. Gloves, safety glasses, and NIOSH/MSHA approved respiratory protective equipment where exposures to nuisance dust may exceed acceptable levels.

Molten Material Release – Wear personal protective equipment. When handling molten materials wear protective clothing, heat resistant gloves, safety glasses, and provide adequate ventilation for vapors from processing.

Methods and materials for containment and cleanup:

General Precautions - Keep unnecessary personnel away of the affected area, isolate hazard area and deny entry.

Resin and dust – spilled materials should be swept up and discarded. Prevent spilled materials from entering waterway or sewer – resin is denser than water.

Molten materials – wait until molten materials are cool enough for handling. Sweep up and discard.
SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not ingest. Avoid to breathe polymer dust. Do not smoke in areas where polymer dust is present. Do not handle hot or molten material without appropriate protective equipment.

Conditions for safe storage: Keep in closed or covered containers when not in use to avoid contamination; Store in a cool dry place with adequate ventilation away from heat and sunlight. Do not store near heat or open flames.

Incompatibilities: Avoid contact with strong oxidizing agents and mineral acids.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: None established for this product, although limits are established for nuisance dust.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH (TLV) 8 hours TWA</td>
<td>10 mg/m³ (inhalable) 3 mg/m³ (respirable)</td>
</tr>
<tr>
<td>OSHA (PEL) 8 hours TWA</td>
<td>15 mg/m³ (inhalable) 5 mg/m³ (respirable)</td>
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</tbody>
</table>

Appropriate engineering controls:

Material handling equipment and operations should be designed to minimize the generation of dust and to ensure that particulate levels are kept below recommended standards.

Equipment that may generate dust clouds of the product should have properly designed explosion relief/suppression systems.

Vapors and gases from thermal processing equipment should be ventilated from the work area.
Individual protection measures:

Eye protection: Wear safety glasses with side shields. Wear a face shield when secondary protection is needed.

Hand protection: Wear heat resistant gloves when handling hot material.

Skin and body protection: Wear heat protective clothing covering arms and legs when handling molten material.

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid pellets</th>
<th>Flammability</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Clear or white</td>
<td>Flammability limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not applicable</td>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
<td>Relative density</td>
<td>1.21 g/cm³ @ 23°C</td>
</tr>
<tr>
<td>Melting point</td>
<td>237°C</td>
<td>Solubility</td>
<td>Insoluble</td>
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<tr>
<td>Boiling point</td>
<td>Not applicable</td>
<td>Partition coefficient</td>
<td>Not applicable (n-octanol/water)</td>
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<tr>
<td>Flash point</td>
<td>&gt;350°C</td>
<td>Auto-ignition temperature</td>
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<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity</td>
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<td></td>
</tr>
</tbody>
</table>

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Strong oxidizing agents

Chemical stability: This material is considered as stable thermoplastic, with no chemical reactivity under normal ambient and anticipated handling conditions.
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Product Name: MX Nylon (Nylon MXD6)

Possibility of hazardous reactions: None.

Conditions to avoid: Avoid heating above the recommended processing temperature. Provide adequate ventilation during heating. Avoid storage or contact with strong oxidizing agents.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition products when the substance exposed to the above processing temperature: carbon monoxide, carbon dioxide, and other nitrogen compounds.

SECTION 11 - TOXICOLOGICAL INFORMATION

 Likely routes of exposure:  

Eye irritation: Solid particles may cause irritation from mechanical abrasion  
Skin irritation: Not expected to cause irritation. Molten materials may cause thermal burns.  
Inhalation: Dust may be inhaled; process fumes may cause irritation.  
Ingestion: Not a likely route of exposure.

Symptoms related to physical, chemical and toxicological characteristics: Not available.

Delayed and immediate effects: Not available

Chronic effects from short and long-term exposure: Not available

Toxicity: LD(50)oral/rat: 5,000 mg/kg

Carcinogenicity: is not listed on either NTP report or IARC Monographs or found to be a potential carcinogen by OSHA.
SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not available
Persistence and degradability: Not available
Bioaccumulative potential: Not available
Mobility in soil: Not available
Other adverse effect: Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Dispose through incineration or authorized landfill in accordance with local, state and Federal regulations. This material, if disposed of, is not considered a hazardous waste under current RCRA definitions.

SECTION 14 - TRANSPORT INFORMATION

UN Number: Not classified as a dangerous good under transport regulations. (UN RTDG);
UN Proper shipping name: Not Applicable.
Transport hazard class: Not Applicable.
DOT: Not Applicable.
ADR / RID: Not Applicable.
IMDG: Not Applicable.
ICAO/IATA: Not Applicable.
HS Code (Customs tariff code)
Polyamides in primary form: other 3908.90
Packing group: Not Applicable.
Environmental hazards: Not Applicable.
Transportation in bulk (Annex II MARPOL 73/78 and IBC Code): Not applicable
Special Precautions: Not Applicable.
SECTION 15 - REGULATORY INFORMATION

TSCA:

All the ingredients are listed in the TSCA Inventory or are compliant with the TSCA polymer Exemption Rule.

SARA:

This product does not contain any toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

OSHA:

This product is not considered a hazardous chemical under 29 CFR 1910.1200 (already included).

CALIFORNIA PROPOSITION 65:

No listed substance.

SECTION 16 - OTHER INFORMATION

Preparation Date: January 6, 2016

Revision History:
March 27, 2019       Rev. 1: Review with no changes
January 6, 2016      Rev. 1: Updated emergency contact.
April 13, 2015       Rev. 0: Initial issue to GHS standard.

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