

# MATERIAL SAFETY DATA SHEET

# TR AidAMID® G BLACK (PA6 C)

## Section 1. COMPANY AND PRODUCT IDENTIFICATION

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**Material Name:** TR AidAMID® G BLACK  
PA6 CAST BLACK

## Section 2. COMPOSITION / INFORMATION ON COMPONENTS

MATERIAL	CAS Number	%
Caprolactam (base polymer)	25038-54-4	>90
Colorants, Lubricants, Stabilizers		<10

Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts can potentially cause injury to the respiratory tract if respirable particles are generated and inhaled in sufficiently high concentrations. Good industrial hygiene practices, as with all dusts, should include precautions to prevent inhalation of respirable particles.

## Section 3. HAZARDS IDENTIFICATION

### Emergency Overview:

#### POLYCAPROLACTAM

In general, skin irritation has not been produced with contact to Nylon 6. However, a small percentage of subjects may respond to prolonged contact with redness of skin. Significant skin permeation, and systemic toxicity, after contact appears unlikely. There are no reports of human sensitization. If particles of Nylon 6 contact the eye, mechanical irritation with tearing, pain or blurred vision may result.

#### CARCINOGENICITY INFORMATION

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

## Section 4. FIRST AID MEASURES

**Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if irritation persists.

**Skin contact:** The compound is not likely to be hazardous by skin contact, but cleansing the skin after use is advised. If molten polymer gets on skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Seek medical treatment for thermal burn.

**Inhalation:** No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary. If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist. If inhalation to dust, shavings, or particulates, use emergency first aid techniques to remove obstruction or to resume breathing and/or call for medical help immediately.

Notice: To the best of our knowledge, the information contained in this Material Safety Data Sheet is accurate. However, neither TR Aid VILLARROYA HNOS. S.L. nor any of its representatives assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. The most recent update can be found at [www.traidvillarroya.com](http://www.traidvillarroya.com).

**Ingestion:** Seek medical attention if large quantities of material have been ingested.

#### Section 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** Water, foam, dry chemical, carbon dioxide.

**Unsuitable extinguishing media:** None known.

**Special protective equipment for fire fighting:** Wear self contained breathing apparatus.

#### **Additional advice:**

**Flash Point:** Not Applicable

**Flash Ignition Temperature:** Approx. 400°C (750°F)

**Fire and Explosion Hazards :** Like most organic materials in powder form, dust generated from this product may form a flammable dust-air mixture. Potential for a dust explosion may exist. Minimize the generation and accumulation of dust. Keep away from sources of ignition. Large molten masses may ignite spontaneously in air. Water quenching of such masses is good practice. Hazardous gases/vapours produced in fire or at temperatures exceeding 300°C (572°F) are Hydrogen Cyanide, Carbon Monoxide, Carbon Dioxide and Nitrogen gasses.

#### Section 6. ACCIDENTAL RELEASE MEASURES

**Methods for cleaning up:** Mechanical.

**Environmental precautions:** Before entry of swarf waste to sewage it should be mechanically cleaned of product remainders.

#### Section 7. HANDLING AND STORAGE

**General advice:** Avoid overheating of material by improper handling and also avoid dust generation.

**Technical measures:** Handle larger and heavier casting with lifting-and-moving equipment or sufficient manpower. Store in a cool dry place.

#### Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Guidelines for materials:** General dust limit value: Inhalable dust: 15 mg/m<sup>3</sup>  
Respirable dust: 5 mg/m<sup>3</sup>

**Respiratory protection:** A NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge with a dust/mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, where exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

**Eye protection:** Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye or face contact with molten material. A full face mask positive-pressure air-supplied respirator provides protection from eye irritation.

**Skin protection:** If there is potential contact with hot/molten materials, wear heat resistant clothing and footwear.

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**Work / hygiene practices:** Eat, drink, or smoke in the designated areas, not in the workplace. Wash hands and face before eating, drinking, or smoking. When manually lifting or lowering large or heavy castings, use proper procedures, e.g. lift slowly with legs from a squat position.

**Ventilation:** If hot processing this material, use local and/or general exhaust ventilation to control the concentration of vapours and fumes below exposure limits. In cutting, grinding, or machining operations with this material, use local exhaust to control the concentration of dust below exposure limits.

### Section 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Solid (semi finished or finished parts).

**Colour:** Various, dependent on colorant.

**Odour:** Odourless.

**Density (20°C):** 1,13 - 1,56 g/cm<sup>3</sup>

**Melting point:** 220°C

**Explosion limits:** Not applicable

**Solubility (20°C):** Insoluble in water, In organic solution applications insoluble.

### Section 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions of use, storage and transportation.

**Conditions to avoid:** Temperatures above 204°C (400°F) cause deformation and melting. Avoid prolonged exposure at or above the recommended processing temperatures.

**Incompatibility with other materials:** Incompatible or can react with strong acids, oxidizing agents and certain salts.

**Hazardous decomposition products:** Hazardous gases or vapours can be released, including Carbon Monoxide, Carbon Dioxide, Nitrogen gasses, ammonia, hydrogen cyanide, aldehydes and ketones.

**Polymerization:** Will not occur.

### Section 11. TOXICOLOGICAL INFORMATION

No information is available. Toxicity is expected to be low based on insolubility in water. Do not discharge to streams, ponds, lakes or sewers.

### Section 12. ECOLOGICAL INFORMATION

Because of insolubility in water separation by filtration or sedimentation is possible.

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**Section 13. DISPOSAL CONSIDERATIONS**

Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. The high fuel value of this product makes option 2 very desirable for material that cannot be recycled, but incinerator must be capable of scrubbing out acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulation.

**Section 14. TRANSPORTATION INFORMATION**

Not a hazardous material for DOT shipping.

**Section 15. REGULATORY INFORMATION**

No warning necessary.

**Section 16. OTHER INFORMATION**

Do not use in medical applications involving permanent implantation in the human body.

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This material safety data sheet is also valid for TR AidAMID® G / TR AidAMID® G BLACK / TR AidAMID® G OIL / TR AidAMID® G MOS2 / TR AidAMID® G MOS2 + OIL / TR AidAMID® G + GRAFITE / TR AidAMID® G HEAT STABILIZED