

Material Safety Data Sheet

According to REACH Regulation (EC) No. 1907/2006 and CLP Regulation (EC) No. 1272/2008

PCR PA6 Regranulate black ex. fishing nets

Product Code: 002402

Issue Date: 10.02.2025

Last Revision Date: 02.07.2025

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY	
1.1 Product Identifier	
Trade name	PA6 Regranulate black ex. fishing nets
Product Code	002402
Chemical nature	Polyamide 6 (100% PCR)
Components contributing to the hazard	Not relevant
CAS Number	25038-54-4
EC Number (Polymer)	Not required
EC Number (ϵ -Caprolactam monomere)	203-313-2
REACH Registration Number	This substance is exempt from REACH registration under Article 2 (9) of REACH
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	Regranulate used for injection moulding and extrusion applications in plastics.
Uses advised against	<p>Medical or pharmaceutical applications involving direct body contact</p> <p>Food contact applications or packaging, unless explicitly certified for such use</p> <p>Aerospace or aviation components</p> <p>Safety-critical automotive parts (e.g. airbags, seatbelt systems)</p> <p>Electrical or electronic components requiring high insulation class or flame retardancy (e.g. UL 94 V-0), unless specifically tested</p> <p>Long-term outdoor, UV-exposed, or high-temperature applications without appropriate stabilization</p>
1.3 Details of the supplier of the safety data sheet	

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 DE-28195 Bremen
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Commercial registration number:
 HRB 33699, Amtsgericht Bremen
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 Marvin Pfeiffer

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 DE68 2907 0050 0211 0799 00
 BIC: DEUTDE33XXX

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Company	Sinox Polymers GmbH
Address	Grünenweg 5-7, 28195 Bremen, Germany
Telephone	+49 178 8175 168
Email	inquiries@sinox-polymers.com
1.4 Emergency telephone number	
General number for medical emergency	112
Emergency poison number (for Bremen)	05 51 19 240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP), the product is **not classified as hazardous**.

2.2 Label elements

Hazard pictograms	None
Signal word	None
Hazard statements	Not applicable
Precautionary statements	<ul style="list-style-type: none"> · P261: Avoid breathing dust or fumes. · P280: Wear protective gloves when handling molten material. · P501: Dispose of contents/container in accordance with local regulations.

2.3 Other hazards

Dust explosion risk	Fine dust may form explosive mixtures with air. Handling of fines below 125µm may require explosion protection measures.
Thermal hazards:	Vapors and fumes generated at high processing temperatures may cause irritation to eyes, nose, throat, and respiratory tract.
Other hazards	In molten state [hot product] in contact with skin and eyes may cause severe burns. Ingestion of a small amount should not pose a hazard

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	<p>Substances contained in the product do not meet the PBT or vPvB criteria according to Annex XIII of the Regulation PBT substances (persistent, bioaccumulative and toxic substances) vPvB substances (substances with very high persistence and very high bioaccumulation potential) REACH. The product does not contain substances on the list established in accordance with Article 59 (1) for endocrine disrupting properties or substances identified as having endocrine disrupting properties in accordance with the criteria set forth in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 in concentrations equal to or greater than 0.1% by weight.</p>
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SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	Polyamide 6
Substance type	Polymer
CAS Number	25038-54-4
EC Number	not applicable
Hazardous impurities	None known

SECTION 4: First-aid measures

4.1 Description of first-aid measures

Inhalation	When fumes of molten material have been inhaled; (1) Move person to fresh air as quickly as possible; (2) rest in half upright position; (3) loosen clothing; (3) keep warm. In case of respiratory problems move person to first aid station for medical treatment.
Skin contact	Any molten material on the skin/burns should be cooled (off) as quickly as possible by means of cold water. Cover the wound with sterile cloth

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	and move person to first aid station or hospital for medical treatment. Attention: never pull off the molten material from the wound.
Eye contact	Rinse eyes immediately with water for at least 15 minutes. If irritation persists, seek medical attention.
Ingestion	No danger of toxicity, this material is biologically inactive.
4.2 Most important symptoms and effects, both acute and delayed	
Inhalation of fumes may cause irritation, headache, nausea.	
Contact with molten polymer may cause burns.	
4.3 Indication of any immediate medical attention and special treatment needed	
No specific antidote known. Treat symptomatically.	

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable	Water spray, foam, CO ₂ , dry chemical powder
Unsuitable	High-pressure water jet

5.2 Special hazards arising from the substance or mixture

During combustion, mainly carbon dioxide and water vapor are emitted. The product melts under the influence of temperature. Combustion is accompanied by smoke and combustion products of technological additives. The molded parts or hard regranulate burn slowly with low smoke concentration, burning droplets and with the release of carbon monoxide and organic substances.

5.3 Advice for firefighters

Use personal protective equipment appropriate to the fire. Follow normal firefighting procedures. Wear appropriate chemical resistant protective clothing and self-contained breathing apparatus (SCBA) in the fire area. In case of fire, cool endangered containers with water. Do not allow leakage into surface or ground water.

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SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment, and emergency procedures
Prevent dust formation. Wear protective clothing.
6.2 Environmental precautions
Must not get into bodies of water or the canalisation system.
6.3 Methods and material for containment and cleaning up
Sweep up the spilled substance and place in suitable containers (suitable bags) or clean containers. Treat the collected material as waste.

SECTION 7: Handling and storage
7.1 Precautions for safe handling
Ensure adequate ventilation. Ensure that there is no release into the environment when handling the product. Prevent the product from entering the sewage system, surface and ground water and soil. Work in accordance with safety and hygiene rules. Use personal protective equipment. Do not eat, drink or smoke during use. Wash hands during breaks and after finishing work. Ensure grounding during pneumatic conveying (explosion protection).
7.2 Conditions for safe storage, including information on any incompatibilities
Store in original, properly labeled containers, in dry areas. Do not expose the material to prolonged storage at temperatures above 80°C and/or UV rays. Do not store or use with incompatible materials (see subsections 10.3-10.5). Do not store together with foodstuffs and animal feed.

SECTION 8: Exposure controls/ personal protection			
8.1 Control parameters			
There are no specific legal workplace limits for polyamide 6 as a polymer. However, general dust limits may apply:			
Parameter	AGW (TRGS 900)	Unit	Remarks
Alveolar dust (A dust)	1.25	mg/m ³	8h, general guideline value

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Inhalable dust (E dust)	10	mg/m ³	8h, general guideline value
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8.2 Exposure controls

Technical measures:

- Effective extraction at emission sources (e.g., hoppers, nozzles) during thermal processing
- Low-dust handling (e.g., by using closed conveyor systems)
- Grounding of conductive plant components to prevent electrostatic discharge (during pneumatic conveying)

8.3 Recommended monitoring procedures

Air measurements in accordance with TRGS 402 / EN 689, e.g.:

- Total dust (E dust), respirable dust (A dust)
- Caprolactam vapors during thermal processing

Dust explosion risk assessment: Verification of KSt/Pmax values through sample analysis

Filter monitoring for extraction systems (pressure difference, particle counter)

8.4 Control of environmental exposure

Prevent entry into sewage systems, soil, or water – plastic granulate poses a physical risk to aquatic organisms (microplastic risk)

Collection trays or systems for outdoor storage and handling

Use dust extraction with filter systems to minimize emissions into the outside air

Wastewater from cleaning processes must be treated before discharge, if necessary

Note: PA6 is not water-soluble and not biodegradable

SECTION 9: Physical and chemical properties

Physical state	Solid at 20 °C
Odor	Faint, typical
Flashpoint	no data available
Color	black
Form	Granulate
Melt point	215 - 225 °C

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Auto Ignition Temp.	450 - 500 °C
Density	1.13 - 1.15 g/cm ³
Self-ignition	Substance is not self-igniting
Solubility in water	Insoluble
Explosion hazard	none, but dust in air is potentially explosive
Dust explosive properties	
Lower explosion limit	< 10g/m ³ air (fines < 125µm)
Dust explosion class (st)	St 1 (fines)

SECTION 10: Stability and reactivity

Reactivity: Stable under normal conditions.
Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: overheat, open fire
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: CO, CO ₂ , NO _x , Ammonia, caprolactam vapors

SECTION 11: Toxicological information

Acute toxicity	None under normal handling conditions
Skin corrosion/irritation	Not classified as irritating. Exposure to decomposition fumes may cause respiratory irritation in sensitive individuals.
Sensitization	No data available.
Carcinogenicity	No evidence of carcinogenicity.

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SECTION 12: Ecological information	
Persistence/degradability	very low UV degradability
Bioaccumulative potential	Low Density Polyethylene is generally considered non-biodegradable and has a low tendency for bioaccumulation.
Mobility in soil	Low mobility
Ecotoxicity	no indication that this material is being a risk to the environment.
Aquatic toxicity	Insoluble non toxic solid material (no water hazard)

SECTION 13: Disposal Considerations
Dispose of in accordance with local, national, and international regulations.
Recycling is recommended where possible.

SECTION 14: Transport information	
UN number	Not applicable
Transport hazard class	Not regulated
Packing group	Not applicable

SECTION 15: Regulatory information	
EU Regulations	<ul style="list-style-type: none"> This product is not classified as hazardous under CLP Regulation (EC) No. 1272/2008. Not listed on the REACH SVHC candidate list. <p>Additional national regulations may apply to recycled plastics in specific applications (e.g., food contact materials)</p>

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SECTION 16: Other information	
Version	1.1
Changes from last revision	Updated Section 8.
Further information	This MSDS is based on available data and does not constitute a guarantee of specific properties.
None of the materials and/or products referenced herein should be used and/or applied in any product, device or material used or for use as human body implant or otherwise within the human body	

Training courses:

Before working with the product, the user should familiarize himself with health and safety rules for handling chemicals and, in particular, receive appropriate job training.