Product Data Sheet

FIBRANT

AP Grade Caprolactam flakes

Formula	$C_6H_{11}NO$ Molecular weight: 113.16 CAS No.: 105-60-2	
Introduction	AP (Anionic Polymerization) Caprolactam is a low moisture monomer used in the manufacturing of Polyamide 6 AP Caprolactam typical use cases: • Casting; • Blocking agents for isocyanates; • Cross linking agent for urethane-polyester coatings. Besides the above, Polyamide 6 is used in many application fields such as: filaments, fibers, films and engineering plastic	
Appearance	AP Caprolactam flakes are a white, hygroscopic crystalline substance with a faint characteristic odor.	
Storage	Store in a segregated, dry, cool and well-ventilated area. Caprolactam must be kept away from flammables, oxidizing agents, strong acids and bases and protected from moisture and direct sunlight.	
Packaging	Inner bag: polyethylene Outer bag: polyethylene, aluminum, polyethylene laminate with labyrinth valves in each corner, to minimize moisture pick up. Net weights of bags 25 kg. ~ 1250 kg / pallet. Delivered in Full Container Loads.	
Safety & Application Info	Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety, handling and disposal.	
Physical properties	Density	600-700 kg/m^3
	Solidification/Melting point	69°C
	Boiling point at 1013 mbar	270°C
	Vapor pressure at 70 °C	±0.5 mbar
	Flash point (closed cup)	139°C
	Auto-ignition temperature	395°C

Specification	Parameter	Value	Analysis Method
	Water	max 0.015 % m/m	Intertek 1797. Karl-Fischer titration based on ISO 760
	Volatile bases	max 0.50 mmol/kg	Intertek 686. Distillation method based on ISO 8661
	Absorbance at 290 nm	max 0.050	Intertek 621. Spectrophotometric method based on ISO 7059
	Permanganate Absorption Number (PAN)	max 4.0	Intertek 1892. Spectrophotometric method based on ISO 8660
	Color	max 5 APHA	Intertek 1373. Spectrophotometric based on ISO 8112
	Alkalinity	max 0.050 mmol/kg	Intertek 1890. Potentiometric titration
	Acidity	max 0.050 mmol/kg	Intertek 1890. Potentiometric titration
	Ash[1]	max 10 mg/kg	Intertek 1971. Gravimetric method
	Insolubles in water[1]	max 5 mg/kg	Intertek 1972. Gravimetric method
	Iron[1]	max 0.5 mg/kg	Intertek 1397. Spectrophotometric method

[1] Skip lot testing

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