

CAPROLACTAM



CAPROLACTAM

Product portfolio

NYLON 6

CAPROLACTAM

CHARACTERISTICS

Caprolactam (HEXAHYDRO-2H-AZEPIN-2-ONE; 2-OXOHEXAMETHYL-ENEIMIN), or caprolactam, is supplied as a flaked or fused product. Flaked caprolactam is a white hygroscopic substance, freely soluble in water and most organic solvents. Fused caprolactam is a clear, viscous hygroscopic liquid. Flaked caprolactam is stored in original packaging on pallets in areas with a maximum relative humidity of 65% (If this condition is not met, caprolactam becomes moist, a maximum temperature of 30°C, and protection from direct sunlight. If storage conditions are observed, the warranty period is three months of shipment from the Caprolactam shop warehouse.

Fused caprolactam is a clear, viscous hygroscopic liquid.

Caprolactam is used to manufacture polyamide 6 and aminocapron acid.

Caprolactam classification is in accordance with Act no. 350/2011 Coll, (Chemical Act), Regulation 1907/2006 (REACH) and Regulation 1272/2008 (CLP) and implementing regulations in their effective versions, and any future replacement legislation, and is listed in the relevant safety data sheet.

Caprolactam is classified as harmful and irritant.

When handling or working with caprolactam, the occupational health and safety regulations stated in Chapter VI of the corresponding company standards and on the safety sheet must always be observed.

Caprolactam is manufactured in accordance with valid technological, fire safety and occupational safety documentation.

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CHARACTERISTICS

QUALITY MARKERS	UNIT	VALUES	TESTING METHOD	
			INTERNAL REGULATION	RESOURCE STANDARD
Solidification point (min.)	°C	69.0	SOP-A-165	ISO 1392
Volatile alkalis (max.)	mekv/kg	0.4	SOP-A-165	ISO 8661
Permanganate number (3% aquatic solution) *, (min.)	s	12000	SOP-A-165	ČSN ISO 1388-12
Permanganate index (3% aquatic solution) *, (max.)	–	4.4	SOP-A-165	ISO 8660
Colour in Hazen units (50% aquatic solution), (max.)	HJ (APHA)	5	SOP-A-165	ISO 8112
Ash (max.)	mg/kg	7	SOP-A-166	ČSN EN ISO 3451-1
Iron (max.)	mg/kg	0.5	SOP-A-166	ČSN ISO 6332
Substances insoluble in water (max.)	mg/kg	5	SOP-A-166	ČSN EN 872
Alkalinity (max.)	mekv/kg	0.1	SOP-A-165	ČSN ISO 6618
Acidity (max.)	mekv/kg	0.05	SOP-A-165	ČSN ISO 6618
Water (max.)	%	0.1	SOP-A-102	ČSN ISO 760
Absorbance (50% aquatic solution, = 290, 10 mm cuvette), (max.)	–	0.05	SOP-A-121	ISO 7059

*] As per the customer's requirement, the manufacturer states and verifies one of the quality standards indicated above, as stated in the relevant quality certificate.