

	CAPROLACTAM
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CAS No. 105-60-2 (caprolactam)

ES No. 203-313-2

CHARACTERISTICS

ϵ -caprolactam (HEXAHYDRO-2H-AZEPIN-2-ONE; 2-OXOHEXAMETHYL-ENEIMIN), or caprolactam, is supplied as a flake or fused product. Flake caprolactam is a white hygroscopic substance, freely soluble in water and most organic solvents. Fused caprolactam is a clear, viscous hygroscopic liquid.

Flake caprolactam is stored in original packaging on palettes in rooms with a maximum relative humidity of 65% (If this condition is not met, caprolactam gets moist.) a maximum temperature of 30 °C, and protection from direct sunlight. If storage conditions are observed the **warranty period is 3 months from shipment from 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 their implementing regulations in their effective versions, and, potentially, legislation that will eventually replace them in the future, 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 shall be always observed.

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

TECHNICAL REQUIREMENTS

Inspection characteristic	Unit	Value	Test Method	
			Internal regulation	Resource standard
Solidification point, min.	°C	69.0	SOP-A-166	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
Color 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.	% wt.	0.1	SOP-A-102	ČSN ISO 760
Absorbance (50% aquatic solution, $\lambda=290$, 10mm cuvette), max.	–	0.05	SOP-A-121	ISO 7059

*) As per the customer's requirement the manufacturer states and verifies, in its quality certificate, one of the quality marks shown above.

Issue number / Revision number	Replaces the Material sheet from	In effect from:	Page 1 of 1
8	2017-01-01	2021-01-01	