



Chemical Name	Caprolactam
Chemical Category (if applicable)	Cyclic amide
Synonyms	ϵ -Caprolactam; 6-Caprolactam; 2-Perhydroazepinone, 2-Oxohexamethylenimine; 2-Ketohexamethylenimine; 6-Hexanelactam; Hexahydro-2-azepinone; Capron PK4; Aminocaproic lactam; 2H-azepin-1, hexahydro; Extrom 6N; Hexahydro-2H-azepin-2-one; 1-Aza-2-cycloheptanone; 2-Azacycloheptanone; Cyclohexanone iso-oxime; and Hexahydro-2-azepinone
CAS Number	105-60-2
CAS Name	Caprolactam
EC (EINECS) Number	203-313-2

Description

- Caprolactam is an essential chemical used in the manufacture of nylon 6 synthetic fibers. Nylon 6 fibers are used in the production of commercial and residential carpet, pharmaceutical and engineering plastics, and automobile plastics parts and housings.
- Caprolactam is a high production volume (HPV) chemical produced at over one million pounds annually and is listed by the United Nations Environmental Program.
- Workplace exposures to caprolactam during its manufacture, and when used as a chemical intermediate for production of other chemicals, are expected to be minimal because exposures to caprolactam dust are controlled with process enclosures, local exhaust ventilation, general dilution ventilation, and use of personal protective equipment. Workplace exposure limits have been established for use in worksite safety programs. Please see the Safety Data Sheet (SDS) for additional information.
- Caprolactam is a solid, occurring as white flakes or crystals that will readily absorb moisture from the air.
- Caprolactam is irritating to the eyes, skin, and respiratory tract. Repeated or prolonged contact may cause inflammation of the skin (e.g. a rash). Breathing caprolactam vapors and/or dust may irritate the membranes of the nose and throat, and it may cause reversible symptoms such as nausea, vomiting, dizziness and headache at high concentrations. Caprolactam is slightly toxic in the unlikely event it's swallowed.
- Caprolactam is rapidly metabolized and eliminated from the body.
- Caprolactam does not interfere with the ability to successfully reproduce or cause adverse effects to a developing child during pregnancy.
- The cancer risk for caprolactam is low.
- The potential for caprolactam to be toxic to aquatic organisms is low.
- Caprolactam has minimal potential to accumulate in the bodies of humans or animals. It is readily biodegradable and will not persist in the environment.

Useful Resources

For more information about this product, [contact AdvanSix](#). Also see the following links:

- [U.S. EPA IRIS Reference Dose for Chronic Oral Exposure](#)
- [IARC Monograph Vol. 71, 1999 - Caprolactam](#)
- [Finnish Environment Institute \(SYKE\) EnviChem Database](#)

Contact AdvanSix

To learn more about caprolactam visit
[AdvanSix.com/chemicalintermediates](https://www.advansix.com/chemicalintermediates)
or call:

1-844-890-8949 (toll free, U.S./Can.)

+1-973-526-1800 (international)

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This product safety summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Safety Data Sheet which should be consulted before use of the chemical. The product safety summary does not supplant or replace required regulatory and/or legal communication documents. Statements concerning use of our products are made without warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.



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