

# Amides, from C<sub>2-9</sub> carboxylic acids and polyethylenimine

---

This document provides a brief description of the subject material, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS Corporation safety data sheet.

## Identification

<b>Chemical Name:</b>	Amides, from C <sub>2-9</sub> carboxylic acids and polyethylenimine
<b>Synonym(s):</b>	Amides, from C <sub>2-9</sub> fatty acids and polyethylenimine
<b>CAS Number:</b>	68876-81-3

## Description

<b>Overview:</b>	The organic amide is a viscous, amber liquid at ambient temperatures possessing an ammonia-like odor.	
<b>Uses:</b>	Amides, from C <sub>2-9</sub> carboxylic acids and polyethylenimine is a textile chemical.	
<b>Properties:</b>	<b>Solubility in Water:</b>	Soluble
	<b>Flash Point:</b>	Open cup: 299°C (570.2°F)
	<b>Relative Density:</b>	1 g/cm <sup>3</sup> (20°C)
	<b>pH:</b>	10.5 [Conc. (%w/w): 2%]

## Potential Human Health Effects

### Occupational Exposure

Potential for occupational exposure exists during manufacture, and in unloading, storage, staging and transfer operations at facilities using the proprietary polymer as an additive or processing aid. A much lower potential for exposure exists in facilities using the polymer in closed manufacturing processes by trained personnel.

### Employee Training

Workers handling the polymer should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Use only with adequate ventilation. If operations generate fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. In cases where ventilation is insufficient or airborne concentrations are unknown, a NIOSH approved, air-purifying organic vapor respirator should be used. In addition, it is recommended that splash proof goggles, permeation resistant gloves, suitable work clothing and foot protection be worn when handling the polymer.

### Consumer Exposure

LANXESS Corporation does not sell amides, from C<sub>2-9</sub> carboxylic acids and polyethylenimine, nor materials containing the substance, to the general public.

### Short-Term Health Effects

The amide carboxylic acid polymer causes serious eye damage. Permanent eye damage may occur. Symptoms of eye contact may include redness, tearing, swelling and burning. Upon contact, skin and respiratory tract irritation may also occur. Inhalation may cause respiratory tract irritation with symptoms of coughing, sore throat, and runny nose. This material is harmful if swallowed. Ingestion may cause burns to the mouth, throat, and stomach. Symptoms of ingestion may include abdominal pain, nausea, vomiting and diarrhea.

### Long-Term Health Effects

No known significant effects or critical hazards.

## Physical Hazards

This material is stable under normal conditions of use. Heating to decomposition may release carbon oxides, nitrogen oxides and other toxic gases/fumes. Avoid extremes of temperature and oxidizing agents.

## Potential Environmental Impact

The substance is readily biodegradable. An accidental release to the environment may pose a danger to fish (high toxicity), invertebrates (high toxicity) and other aquatic organisms (high toxicity) prior to degradation.

### Conclusion

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, this substance is not expected to pose a significant risk to human health or the environment.

### References

*European Chemicals Agency, Amides, from C2-9 carboxylic acids and polyethylenimine,*  
C&L Inventory, February 2018  
*Safety Data Sheet (SDS)*, LANXESS Corporation

### Contact Information

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive,  
Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

### Notices

#### Use and Application Information

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.