

# 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine

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This document provides a brief description of 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine, as represented by GRIVORY® XE 3504 NATUR, 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>Product Name:</b>	GRIVORY® XE 3504 NATUR
<b>Chemical Name:</b>	1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine
<b>Synonym(s):</b>	Hexamethylene diamine, isophthalic acid polymer
<b>CAS Number:</b>	25722-07-0

## Description

<b>Overview:</b>	1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is sold under the trade name GRIVORY®. 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is an odorless, granular solid at ambient temperatures.						
<b>Uses:</b>	1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is an engineering thermoplastic sold by LANXESS for use in the production of plastic components requiring heat and chemical resistance.						
<b>Properties:</b>	<table><tr><td><b>Melting Point:</b></td><td>180°C (356°F)</td></tr><tr><td><b>Flash Point:</b></td><td>Closed cup: &gt;400°C (&gt;752°F)</td></tr><tr><td><b>Solubility in Water:</b></td><td>Insoluble in cold water</td></tr></table>	<b>Melting Point:</b>	180°C (356°F)	<b>Flash Point:</b>	Closed cup: >400°C (>752°F)	<b>Solubility in Water:</b>	Insoluble in cold water
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<b>Solubility in Water:</b>	Insoluble in cold water						

## **Potential Human Health Effects**

### **Occupational Exposure**

Potential for occupational exposure exists during manufacture, at unloading, storage and staging areas and during injection molding and other operations where 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is used in the manufacture of other products. A much lower potential for exposure exists in facilities using the product in closed manufacturing processes by trained personnel.

### **Employee Training**

Workers handling 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. LANXESS recommends long pants, a long-sleeved shirt, suitable protective footwear and gloves be worn when handling 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine. Workers handling hot material should wear heat-resistant protective gloves that are able to withstand the temperature of the molten product. Safety glasses with side shields should be worn if eye contact is possible. Thermal processing operations should be ventilated to control gases and fumes given off during processing. A respirator is not required under normal conditions of use.

### **Consumer Exposure**

LANXESS Corporation does not sell 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine to the general public.

### **Short-Term Health Effects**

Skin contact with heated 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine may cause thermal burns. Prolonged or repeated exposure may cause redness, itching, swelling, burning and possible permanent skin damage.

### **Long-Term Health Effects**

No long-term adverse health effects are expected.

## **Physical Hazards**

1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is stable under normal conditions of use. Heating to decomposition may release carbon dioxide, carbon monoxide, hydrogen cyanide, pyridine, hydrocarbons, amines and nitriles. Melted product is flammable and produces intense heat and dense smoke during burning. Avoid heat, open flames and other potential sources of ignition.

## **Potential Environmental Impact**

No significant effects or critical hazards would be expected from an accidental release of this product to the environment.

## **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, 1,3-Benzenedicarboxylic acid, polymer with 1,6-hexanediamine is not expected to pose a significant risk to human health or the environment.

## **References**

*Safety Data Sheet (SDS), GRIVORY® XE 3504 NATUR*, LANXESS Corporation  
*TOXNET ChemIDplus*, U.S. National Library of Medicine

## **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.