

## Polyester Resin

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This document provides a brief description of the aforementioned 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>	Hexanedioic acid, polymer with 1,3dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 2,2-dimethyl-1,3-propanediol	
<b>Synonym(s):</b>	Neopentylglycol, trimellitic anhydride, adipic acid resin Adipic acid with trimellitic anhydride and neopentylglycol polymer Trimellitic anhydride, neopentyl glycol, adipic acid polymer	
<b>CAS Number:</b>	28407-73-0	
<b>Applicable LANXESS Materials:</b>	Uniplex 670P	Uniplex 670-P Stocks

### Description

<b>Overview:</b>	The polymer is a clear, viscous liquid at ambient temperatures possessing a slight odor.	
<b>Uses:</b>	The polyester resin is used in the aforementioned LANXESS materials for use in fingernail enamels to impart adhesion, wear and water-resistant properties.	
<b>Properties:</b>	<b>Solubility in Water:</b>	Slight
	<b>Molecular Weight:</b>	442.417 g/mol
	<b>Boiling Point:</b>	220°C (428°F)
	<b>Flash Point:</b>	Open cup: 73°C (165°F)

### 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 listed LANXESS materials in the manufacture of other products. A much lower potential for exposure exists in facilities using the listed materials in closed manufacturing processes by trained personnel.

#### Employee Training

Workers handling the aforementioned LANXESS materials should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Process enclosures, explosion-proof local exhaust ventilation or other engineering controls should be used to keep worker exposure below any recommended or statutory limits. The engineering controls also need to keep gas/vapor concentrations below any lower explosive limits. It is recommended that safety glasses with side-shields and permeation resistant gloves, clothing and foot protection be worn. In cases where ventilation is insufficient or airborne concentrations are unknown, a NIOSH approved, air-purifying organic vapor respirator should be worn.

#### Consumer Exposure

LANXESS Corporation does not the aforementioned polymer, nor materials containing the polyester resin, to the general public.

#### Short-Term Health Effects

No short-term health effects are expected in association with the polyester resin.

#### Long-Term Health Effects

There are no known long-term effects associated with the organic compound.

### Physical Hazards

The polyester resin is stable under normal conditions of use. Heating materials containing the component may release carbon monoxide and carbon dioxide. 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 into 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, the polymer is not expected to pose a significant risk to human health or the environment.

### References

*Computational Toxicology Research: Chemical Use, Hexanedioic acid, polymer with 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 2,2-dimethyl-1,3-propanediol, 2017, United States Environmental Protection Agency*

*European Chemical Agency, Polyester Resin Product, December 2017*

*Safety Data Sheet (SDS), Uniplex 670P, LANXESS Corporation*

### Contact Information

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### 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.