

Desmodur[®] RFE

Characterization

Desmodur RFE is a solution of tris(p-isocyanatophenyl) thiophosphate in ethyl acetate.

Desmodur RFE is a crosslinker with very universal suitability for adhesives based on Desmocoll[®], natural or synthetic rubber with special adhesion on rubber materials.

Form supplied

Form supplied is approximately 27% in ethyl acetate.

Characteristic data

Property	Value	Unit of measurement	Method
NCO content	7.2 ± 0.2	%	

Other data*

Property	Value	Unit of measurement	Method
Non-volatile content	approx. 27	%	
Density at 20°C	approx. 1.0	g/cm ³	
Viscosity at 20°C	approx. 3	mPa•s	
Solvent	Ethyl acetate		
Flash point	-4	°C	

*These values provide general information and are not part of the product specification.

Desmodur[®] RFE

Properties / Applications

After adding of Desmodur RFE, the ready-to-use two-component adhesive must be used within its pot life. This is not only governed by the polymer content of the adhesive but also by its other components (resins, antioxidants, plasticisers, solvents, etc.). At the end of the pot life, usually several hours or one working day, the adhesive becomes increasingly difficult to work and its viscosity increases rapidly. Finally, irreversible gelling occurs.

The following guide values can be used in determining the addition by weight.

To crosslink 100 pbw adhesive:

Desmocoll (hydroxyl polyurethane)

4 - 7 pbw Desmodur RFE

(polyurethane content approx. 20%)

As with any product, use of Desmodur RFE in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.



Desmodur[®] RFE

Storage

Desmodur RFE should be stored in tightly sealed original containers and protected from moisture, heat, and foreign materials. During transportation and storage at low temperatures, crystalline deposits may form. These redissolve at room temperature. The product is highly sensitive to moisture and reacts with water to form carbon dioxide and insoluble ureas. The containers must therefore be kept tightly sealed. The ingress of water in any form (damp containers, anhydrous solvents, moist air) must be prevented as otherwise the formation of carbon dioxide may cause a dangerous increase in pressure in the containers. Exposure to air and/or light intensifies discoloration but this has no effect on the processing properties in general. Recommended storage temperature is 10°-30°C.

Storage time

Desmodur RFE has a shelf life of twelve months from date of receipt at customer, provided the material is stored in sealed original containers at the recommended storage temperature.

Other Information

Desmodur[®] and Desmocoll[®] are registered trademarks of the Covestro Group.

Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., safety data sheets and product labels. For further information contact your Covestro LLC representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

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 utilize our products, technical assistance and information to determine to your own satisfaction whether our products, technical assistance and information 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 which are available upon request. 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 any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

Editor: Covestro LLC
1 Covestro Circle
Pittsburgh, Pennsylvania 15205
United States
www.covestro.com

Contact:
CA Single Point of Contact Office
Tel. 412-413-3983

page 3 of 3

Document contains important information and must be read in its entirety.

Edition 2016-02-19

Replaces edition dated 2002-06-24

 **Desmodur[®]**
Product Datasheet