

Desmodur[®] RC

Characterization

Solution of a polyisocyanurate of toluene diisocyanate (TDI) in ethyl acetate. Desmodur[®] RC is suitable for crosslinking adhesives based on Desmocol[®], natural or synthetic rubber, especially pale-coloured adhesives used to bond rubber materials.

Form supplied

approx. 35 % in ethyl acetate

Appearance

Virtually colorless to slightly yellowish liquid. The color does not influence the quality of the bonds.

Specification

Property	Value	Unit of measurement	Method
NCO content	7.0 ± 0.2	%	DIN EN ISO 11 909, Annex A

Other data*

Property	Value	Unit of measurement	Method
Solids content	approx. 35	%	
Density at 20 °C	approx. 1.01	g/cm ³	DIN 53 217/5
Viscosity at 20 °C	approx. 3	mPa·s	DIN 53 015
Solvent	Ethyl acetate		
Flash point	- 4	°C	DIN 51 755

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

Desmodur[®] RC

Properties / Applications

After addition of Desmodur[®] RC, 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 constituents (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:

Desmocol[®] (hydroxyl polyurethane)
4 - 7 pbw Desmodur[®] RC
(polyurethane content approx. 20 %)

Baypren[®] (chloroprene rubber)
4 - 7 pbw Desmodur[®] RC
(rubber content approx. 20 %)

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Storage

- Storage in original sealed Covestro container.
- Recommended storage temperature: 0 - 30 °C.
- Protect from moisture, heat and foreign material.

General information: The product is highly sensitive to moisture and react 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 accelerates yellowing but this has no effect on the processing properties in general.

Storage time

Covestro represents that, for a period of twelve months following the day of shipment as stated in the respective transport documents, the product will meet the specifications or values set forth in section "specifications or characteristic data" above, what ever is applicable, provided that the product is stored in full compliance with the storage conditions set forth in and referenced under section "storage" above and is otherwise handled appropriately.

The lapse of the twelve months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, Covestro recommends to test such a product if it still meets the specifications or the set values. Covestro does not make any representation regarding the product after the lapse of the twelve months period and Covestro shall not be responsible or liable in any way for the product failing to meet specifications or the set values after the lapse of the twelve months period.



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Labeling and REACH applications

This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently **valid Safety Data Sheet**.

Further information

The product is used mainly as a hardener in coating materials or adhesives. The handling of coating materials or adhesives containing reactive polyisocyanates and residual **monomeric TDI** requires appropriate protective measures referred to in the safety data sheet. These products may therefore be used only in industrial or trade applications. **They are not suitable for use in homemaker (DIY) applications.**

Disposal

Please pay attention to the current safety data sheet.

Packaging

Metal containers: 1 litre bottle containing 0.8 kg, can containing 50 kg

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 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.

This product is not designated as „Medical Grade“ (1) and therefore shall not be considered a candidate for the manufacture of a medical device or of intermediate products for medical devices, which are intended under normal use to be brought into direct contact with the patient's body (e.g., skin, body fluids or tissues, including indirect contact to blood)*. This product is also not designated for Food Contact (2), including drinking water, or cosmetic applications. If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices, for Food Contact products or cosmetic applications Covestro must be contacted in advance to provide its agreement to sell such product for such purpose. Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or cosmetic applications must be made solely by the purchaser of the product without relying upon any representations by Covestro.

1) Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

2) As defined in Commission Regulation (EU) 1935/2004.

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page 4 of 4

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Product Datasheet