



DESMODUR E 744

Aromatic Polyisocyanate

Product Code D302

Effective: 6/30/02

Description

Desmodur E 744 is an aromatic polyisocyanate prepolymer based on diphenylmethane 4,4'-diisocyanate (MDI).

Application

Desmodur E 744 polyisocyanate can be combined with a variety of different polyols to produce two-component coatings that have good toughness and elasticity. These coatings can be used as high solids or solvent-free systems in application areas such as membranes, deck coatings, pipe coatings, roof coatings, binders, encapsulants, product finishing, or coatings for solvent-sensitive substrates such as polystyrene foam and other plastic materials.

Product Specifications

Property	Value
NCO content, %	23.0–24.0
Viscosity @ 25°C, mPa•s	300–900

Typical Properties*

Property	Value
Appearance	Clear, brownish yellow liquid
Weight per gallon, lb. @ 25°C	10.1
Solids, wt. %	100
Flash point (Pensky-Martens Closed Cup)	370°F
Equivalent wt., avg.(as supplied)	179 (188°C)
Specific gravity @ 25°C	1.21

Storage

Desmodur E 744 polyisocyanate is sensitive to moisture. Containers should be tightly sealed and protected from heat, moisture, and foreign materials and stored at approximately 77°F (25°C). Under these storage conditions, Desmodur E 744 polyisocyanate will remain clear and constant in composition for periods up to six months. In order to maintain product uniformity, protect from freezing. If freezing does occur, resulting in cloudiness or solidification, the product can be restored by heating to 122–131°F (50–55°C) for the minimum amount of time necessary to render it clear. During this process it is necessary to roll or shake the drum to avoid localized heating. There is a risk of MDI dimer formation during the heating process that could exceed the dimer solubility at room temperature. Remelting should take place promptly. The rate of dimer formation in the solid state is significantly greater than the rate in the liquid state at the same temperature. Please consult your Bayer representative for additional information should this procedure become necessary.

Health and Safety Information

Appropriate literature has been assembled which provides information pertaining to the health and safety concerns that must be observed when handling Desmodur E 744 polyisocyanate. For materials mentioned that are not Bayer products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer should be followed. Before working with any product mentioned in this publication, you must read and become familiar with available information concerning its hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms such as material safety data sheets and product labels. For further information contact your Bayer MaterialScience representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, Pa.

* These items are provided as general information only. They are approximate values and are not part of the product specifications.

Note: The information contained in this bulletin is current as of June 2002. Please contact Bayer MaterialScience to determine whether this publication has been revised.

Bayer MaterialScience LLC

100 Bayer Road • Pittsburgh, PA 15205-9741 • Phone: 1-800-662-2927 • www.BayerMaterialScienceNAFTA.com

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.

Sales Offices

17320 Redhill Avenue, Suite 175, Irvine, CA 92614-5660 • 1-949-833-2351 • Fax: 1-949-752-1306
1000 Route 9 North, Suite 103, Woodbridge, NJ 07095-1200 • 1-732-726-8988 • Fax: 1-732-726-1672
2401 Walton Boulevard, Auburn Hills, MI 48326-1957 • Phone: 1-248-475-7700 • Fax: 1-248-475-7701

6/02