

## PRODUCT INFORMATION

Coatings and  
Colorants Division[View Disclaimer Below](#)

# DESMODUR E 744

## Aromatic Polyisocyanate

Product Code D-302

### I. DESCRIPTION

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

### II. PRODUCT SPECIFICATIONS

NCO content, %	23.0-24.0
Viscosity @ 25°C, mPa·s	300-900

### III. TYPICAL PROPERTIES\*

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

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

### IV. 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.

### V. 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.

## VI. HEALTH AND SAFETY INFORMATION

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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 representative or the Product Safety representative for Coatings products.

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**I would like to request a sample of this product, [click here.](#)**

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