



Isonate 143L

Polycarbodiimide- modified Diphenylmethane diisocyanate

Catalog Nr. Q548

Definition ISONATE* 143L modified MDI is a polycarbodiimide-modified diphenylmethane diisocyanate. Liquid at room temperature, this product has a low viscosity and good storage stability down to 75°F (24°C). The polycarbodiimide adduct offers extra flexibility because adduct formation is reversible (dissociation generates an additional isocyanate function). The carbodiimide linkage aids the stabilization of the polymer against hydrolytic degradation. Because this product can be used alone or in mixtures with prepolymers, its higher functionality offers faster demold times than is ordinarily possible with linear prepolymers. A unique combination of high modified MDI content, available carbodiimide, and liquid state allows ease of handling, ease of processing and maintenance of high physical properties under strenuous wear and environmental conditions.

CAS Number

Application • Adhesive and sealants, • Elastomers, • Coatings, • Automotive bumpers, fenders, fascia, • Integral-skin plastics, • Tires and wheels, • Industrial wheels, • Shoe soles.

Technical Data

Typical Properties:

Properties	Typical Value
Isocyanate equivalent weight ²	144.5
NCO content by weight, % ²	29.2
Hydrolyzable chloride, ppm ²	30
Acidity, % as HCl ²	0.002
Viscosity, cps @ 25°C (77°F)	33
Density, g/ml @ 25°C (lb/gal @ 77°F)	1.214 (10.1)
Vapor pressure, mm Hg @ 25°C (77°F)	<10-5
Extrapolated boiling point, °C (°F)	314 (597)
Appx. decomposition point, °C (°F)	230 (446)
Flash point, °C, ASTM D 93 Closed Cup (°F)	>177 (>351)
Specific heat, gm•cal/gm•°C	0.43
Thermal conductivity, gm•cal/cm•sec•°C	0.0003
Coefficient of thermal expansion, kg/l/1°C	0.0009
Heat of vaporization, cal/gm	86
Viscosity growth, cps/mo. @ 25°C ³ (77°F)	2-5

Packaging & Handling 500 Lb drums

READ AND UNDERSTAND MSDS BEFORE HANDLING THIS PRODUCT.

UN Number Class Packaging Group

Remarks Do not allow product temperature to fall below 75 F (18C). Crystallization may occur.