DESMODUR® 44V20L

General Properties and Applications	Desmodur 44V20L is a liquid, dark brown mixture of diphenylmethane-4,4'-diisocyanate (MDI) with isomers and homologues of higher functionality. It is used in conjunction with polyols to produce rigid polyurethane foams.
Sampling	Exposure to moisture must be prevented when taking product samples

Specification

Property	Value	Unit of measurement	Method
NCO content	30.5 - 32.5	% by wt.	2011-0248603-94
Viscosity 25 °C*)	160 - 240	mPa·s	2011-0313703-95
Acidity	max. 200	ppm HCl	2011-0461102-96

*) Lengthy storage can lead to an increase in the viscosity of Desmodur 44V20 L, although in our experience this has no adverse effect on the processing properties of the product.

Other Data*

Property	Value	Unit of measurement	Method
Density 20 °C	approx. 1.23	g/cm³	DIN 51757
Phenylisocyanate content	max. 50	ppm	2011-0489801-95
Coefficient of thermal expansion	6.59 . 10-4	K-1	
Specific heat (cp)	approx. 1.51	kJ/kgK	

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

Packaging	Drums, IBCs, tank containers and tank wagons
Storage	Recommended storage temperature: + 10 to + 30 °C (in exceptional cases up to 50°C) Storage stability (ex works): 6 months if stored in moisture-tight drums
Labeling	This product data sheet is only valid in combination with the corresponding current safety data sheet! Any updating of safety relevant information – in accordance with EU directives – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. For further technical information relating to safety, the Safety Data Sheet should be consulted.

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Directions for Processing

Desmodur 44V20 L may undergo partial crystallization at temperatures below 0 °C. The product can, however, be brought back into the liquid state by heating the entire contents of the drum for a short time to a maximum of 70 °C, although this may lead to an increase in the solids content.

Drums including empty ones should always be kept tightly sealed. The product should never be allowed to come into contact with water, which reacts with Desmodur 44V20 L to form polyureas and carbon dioxide. Contact with water in any form (damp drums, solvents containing water, moist air) must be prevented not only during storage, but also when removing material from drums and during processing. Failure to do so may lead to a dangerous build up of pressure in tanks and drums due to the generation of carbon dioxide. In addition, polyureas forming in Desmodur 44V20 L can cause solids to separate out, leading to blockages in the filters, pumps and pipelines of the processing equipment and resulting in production problems.

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