

POL 500 E

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Description:

POL 500 E is a formulated Polyol to be used in combination with C-Pentane, HCFC141b or CFC R-11 as blowing agent, for the thermal insulation of freezers and refrigerators.

This Polyol is a mixture of polyether polyols, glycols, activators (contains amine), stabilizer, and does not contain any physical blowing agent.

The product is based on Diphenyle Methane Diisocyanate and can be used with all available brands of MDI possessing the below mentioned properties.

POL 500 E

Specification and typical properties

Appearance	Light brown liquid
Viscosity at 25 ° C	2700-3200 mPa.s
Density at 25 ° C	approx. 1.10 g/cm ³
OH Value	390-410 mgKOH/g

MDI

Specification and typical properties

Appearance	Dark brown liquid
Viscosity at 25 ° C	approx. 160-240 mPa.s
Density at 20 ° C	approx. 1.23 g/cm ³
NCO content	30.5 -32.5 % by wt.
Acidity max.	200 ppm HCl

Processing Conditions and performance (LAB TEST)

Product	Parts by weight	Cream time (sec.)	Gel time (sec.)	Free rise density kg/m ³
POL 500 E	100	9 - 13	64 - 69	25 - 27
R-11	20			
MDI	135~140			

Product	Parts by weight	Cream time (sec.)	Gel time (sec.)	Free rise density kg/m ³
POL 500 E	100	9-13	65-70	23-25
C- Pentane	12			
MDI	135~140			

Laboratory conditions:

Ambient temperature:	22~25 °C
Elevation:	1000 meters from sea level
Mixer speed:	5000 rpm
Mixer time:	6~8 sec
Iso/Polyol temperature	24±1 ° C.
Mould temperature	40~45 ° C

Typical Foam Properties

Item	Units	Results (R-II)
Density Core	Kg/m ³	32-35
Overall	Kg/m ³	36-38
Compression Strenght	N/mm ²	0.16
Dimensional Stability	%	-28° C <0.5
		+100° C <2
Thermal Conductivity at 20° C	W/mK	0.0198
Closed cell content	%	>90

Shelf life Shelf life is guaranteed for 6 months.

Safety Information

Avoid direct skin contact as it may cause irritation/ blistering. If spilled over eyes should be rinsed with eyewash solution and cold water. If ingested, mouth should be washed with water and should not induce vomiting.

Preparation Before using, this polyol has to be mixed very well.

Packing POL 500 E will be delivered in 220 kg net drums.

This product is very sensible to moisture and drums have to be closed very well.
The recommended storage temperature is between +15° and +25° C.
Polyol should not be stored below 15 ° C and Isocyanate not below 15 ° C.
The storage life is guaranteed for 6 months.