

# POL 500

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## Description:

POL 500 is a formulated Polyol to be used in combination with HCFC 141b or CFC 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

### Specification and typical properties

Appearance	Light yellow liquid
Viscosity at 25 ° C	approx. 2700-3200 mPa.s
Density at 25 ° C	approx. 1.10 g/cm <sup>3</sup>
OH Value	410-420 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 <sup>3</sup>
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 <sup>3</sup>
POL 500	100	10-15	68-78	23-25
141 B	20			
MDI	135			

## Laboratory conditions:

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

## Typical Foam Properties

Item	Units	Result
Density Core	Kg/m <sup>3</sup>	32-35
Overall	Kg/m <sup>3</sup>	36-38
Compression Strenght	N/mm <sup>2</sup>	150
Dimensional Stability -28°	%	<1
24 hrs +70°		
Thermal Conductivity	W/mK	
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 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.