



**SOLVAY**

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**SOLKANE®**



**IXOL® M125**

Reactive Flame-Retardant  
for Rigid Polyurethanes



## A high standard in fire safety

## General characteristics\*

## Broad areas of application

The polyol IXOL® M125 is a halogenated aliphatic polyether diol. Due to its low functionality, IXOL® M125 is particularly suited for one component polyurethane (PUR) foams or for polyisocyanurate (PIR: PUR foams modified with isocyanurate structures) foams to meet high standards in fire safety. Being a reactive compound, IXOL® M125 polyol guarantees a permanent flame retardant effect since the halogens are chemically bound to the final polymer.

IXOL® M125 has been manufactured in our Tavaux plant (France) for more than 25 years. As a mature product the manufacturing process is proven and runs totally under computer control, which ensures optimum and constant quality. Furthermore the plant is certified according to ISO 9002 standard.

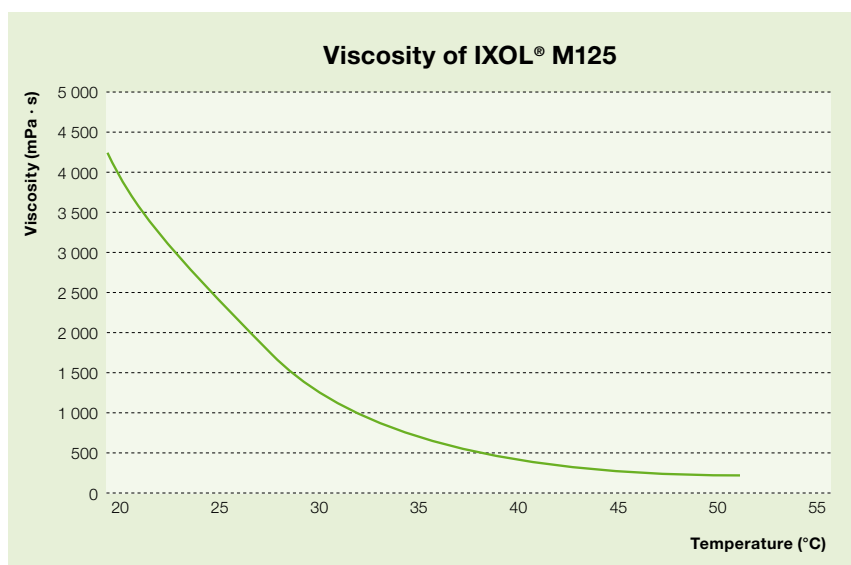
<b>Density at 25 °C</b>	g/cm <sup>3</sup>	1,570
<b>Viscosity at 25 °C</b>	mPa · s	2,900
<b>Hydroxyl number</b>	mg KOH/g	239
<b>Acidity</b>	mg KOH/g	< 0.3
<b>Water content</b>	wt-%	< 0.2
<b>Bromine</b>	wt-%	≈ 32
<b>Chlorine</b>	wt-%	≈ 7.0
<b>Appearance</b>		brown liquid

\*These values are given as an indication and do not represent sales guarantees. Sales guarantees are available on request.

The polyol IXOL® M125 is compatible with all usual polyols and with flame retardant additives such as for example phosphoric acid esters. IXOL® M125 has a good premix stability in preformulated systems, even if stored for a longer time. The use of IXOL® M125 therefore offers considerable flexibility in formulation.

Nevertheless, formulators and users are advised to check that their formulations or the properties of their resulting foam do not alter with time, when long term stability of the blends is required.

IXOL® M125 is a low viscous polyol at room temperature which enables an easy processing or use in special application such as one component foams (OCF). The graph given here shows the typical data:



## Product use

IXOL® M125 imparts advantages as a high performance flame retardant in the following main applications:

- One component foams: IXOL® M125 used in combination with polyether polyols or with polyester polyols gives a foam achieving a high flame suppression standard, for example the B2 classification according to the German standard DIN 4102.
- PIR foams blown with SOLKANE® 365mfc (HFC), SOLKANE® 141b (HCFC) or hydrocarbons such as n-pentane: The use of IXOL® M125 allows a reduction of the isocyanate index and therefore has a positive impact on the foam friability.
- Adhesives: IXOL® M125 improves the fire performance of PU based adhesives.
- Special systems: IXOL® M125 can be used in combination with other polyols including the polyol IXOL® B251. The association of those two brominated polyols can help to reach a good compromise between the fire properties and the mechanical properties of the foam.

Please ask for our brochure IXOL® B251, reactive flame retardant for rigid polyurethane foams

## Safety and handling

IXOL® M125 can be considered as a moderately harmful product. Therefore it does not present any risk as long as normal handling precautions are observed.

It is advised to avoid contact of IXOL® M125 with the skin and the eyes, especially to avoid ingestion. It is always recommended to wear protective gloves and goggles.

In case of contact with the skin, wash the affected part with warm water and soap. For the eyes, rinse abundantly with warm water, call a physician.

For further information refer to our Material Safety Data Sheet.

## Packaging and storage

IXOL® M125 is delivered in:

- drums of 300 kg net
- intermediate bulk containers (IBC) of 1.5 t net
- road tankers (only Europe).

IXOL® M125 is non-corrosive under normal storage conditions. Since it is hygroscopic, it should be kept in a closed container. Heating IXOL® M125 polyol above 50 °C must be avoided because this may promote its alidification.

The shelf life of IXOL® M125 is two years from packaging date in original unopened drum or IBC, provided the storage temperature will not exceed 25 °C.



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