

Synthemad

9111-X-AE / 9111L-X-AE

Isocyanate

H30

DESCRIPTION

A two-component polyurethane system suitable for making rigid foam with a moulded density of 250 - 450 g/l. Does not contain CFCs or HCFCs.

COMPONENTS

- COMPONENT A:** **Polyol 9111-X-AE**
A mixture of polyols containing catalysts, additives, surfactants and foaming agents.
- COMPONENT B:** **Isocyanate H30**
MDI (Methylene diphenyl diisocyanate)

USES

The system is designed for making moulded pieces of high technical value in a broad range of densities. It is specially suitable for use in such diverse sectors as the furniture industry, the car industry, technical parts, casings for electrical apparatus, computers, mouldings, adornments, frames, etc
This system contains additives that improve the fire reaction.

CONDITIONS OF USES

The system can be used in both low pressure and high pressure (100 - 150 bar) machines.
The recommended temperature of the components is 22 ± 2 °C and that of the mould between 40 and 50 °C.
Before being loaded into the machine, component A (polyol) must be homogenised for 5 - 10 minutes in a suitable mixer.
The flow rate of the machine should be calculated as a function of the weight of the finished piece and the reaction times of the foam; the product should be injected into the mould in less time than the cream.
The following factors are important in ensuring that the finished piece is of good quality: the design of the mould, the thickness and shape of the insert, the gas outlet holes, the angle of the mould and the type and composition of the demoulder

COMPONENTS CHARACTERISTICS

Characteristics	Units	H30	9111-X-AE	9111L-X-AE
Specific weight 25°C	g/cm ³	1.23	1.08	1.08
Viscosity 25°C	mPa.s	250	800	800
Ignition temp..	°C	> 200	> 170	> 170
NCO content	%	31	--	--

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SYSTEM SPECIFICATIONS

Measurement carried out in a test recipient at 22°C and at the mix ratio indicated within the company's standard method (MAN - S03).

Mix Ratio A / B : 100 / 100 ± 5 in weight.

Characteristics	Units	9111-X-AE	9111L-X-AE
Cream time	s	22.5 ± 2.5	40 ± 3
Gel time	s	75 ± 5	175 ± 10
Track free time	s	90 ± 10	200 ± 10
Free density	g / l	110 ± 10	115 ± 10

FOAM SPECIFICATIONS

Characteristics	Units	9111-X-AE	9111L-X-AE	
Moulded Density	DIN 53215	Kg/m ³	300-350	300-350
Shore hardness	DIN 53505	ShD	40-50	40-50
Bending Strength Deflection	DIN 53423	Kg/cm ² mm	80-100 7-9	80-100 7-9
Compressing Strength Swaging	DIN 53421	Kg/cm ² %	45-55 10	45-55 10
Dimensional Stability 24 hours	-30°C +80°C	% Vol.	<0.5 <0.5	<0.5 <0.5
Water absorption 168 hours	DIN 53472	%	1	1

STORAGE RECOMEMNDATIONS

The components A and B are sensitive to moisture and should therefore be stored in air-tight drums or tanks. Storage temperature should be between +15 and +25 °C.

Lower temperatures should be avoided, as they may cause crystallisation of the isocyanate. Higher temperatures should also be avoided, as they may cause alterations to the polyol.

Under suitable storage conditions, component A (polyol) will be suitable for use for 6 months and component B (isocyanate) for 9 months.

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SAFETY RECOMMENDATIONS

The system does not present any significant risks, provided it is handled properly: avoid contact with the eyes and skin. The "Safety Data Sheets" of the products concerned must be taken into account while making up or handling the system.

SUPPLY

The material is normally supplied in non-returnable 220-litre drums (blue for component A and black for component B).