Technical Data Sheet

Polyol Sanyol 3423

Revision: July 2026

Product Description

Sanyol 3423 is a formulated polyol for the production of PU foam via reaction with polyisocyanate in the presence of cyclopentane or synthesized 141b blowing agent during the process. Excellent operationality, flowability, and good demolding are the main features when it reacts with PM-200 or KP-200, as recommended isocyanates for the formulation. As with any product, the use of the Sanyol 3423 in a given application must be tested (including field testing, etc.) to determine suitability.

Application Areas

Sanyol 3423 is particularly used for the production of PU foam having a rigid core applicable in domestic and commercial freezers and refrigerator insulations.

Benefits

- Good density distribution
- High compressive strength
- High Adhesion to metal and polymeric bodies
- Excellent dimensional stability (low shrinkage)
- Good insulating properties
- High moisture and aging resistance

Processing Conditions

The Sanyol 3423 system can be processed by a high (or low) pressure machine. It is essential to have equipment that consistently delivers accurate amounts of polyol and isocyanate to be mixed to achieve production with high performance.

Packaging, Storage & Handling

Sanyol 3423 is packed and delivered in Iron drums, 200 kg per drum as a standard pack. It should be kept in properly sealed, moisture-tight containers, and stored indoors in a dry and well-ventilated area at ambient temperature (15-35 ℃). Storage at low temperatures (below 5 ℃) may lead to a marked increase in viscosity markedly, and this may cause difficulties in processing. Extended storage at temperatures above 60 (℃) is not recommended to prevent deterioration of the product quality.

Safety

Most polyols generally present no significant hazard in use when simple precautions are followed. No special ventilation is recommended under normal utilization beyond that needed for normal comfort control. Eye protection, such as chemical splash goggles and/or face shields, must be worn in feasible eye contact due to splashing or spraying liquid, airborne particles, or vapor. Contact lenses must not be worn. Emergency eye-wash fountains and safety showers should be available near any potential exposure. By all means, there is no skin hazard. However, washing hands and other exposed areas with mild soap and water before eating, drinking, smoking, and when leaving work is recommended.

Shelf Life

Under recommended storage conditions, the shelf life of Sanyol 3423 is six months from the date of production.

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Product Specification

Property	Unit	Value	Test Method/Standard
Viscosity at 25 (°C)	mPa.s	1500 – 2000	ASTM D4878
Density at 25 (°C)	g/cm^3	1.05 ± 0.05	ASTM D4669
OH Value	mg KOH/g	310 – 330	ASTM D4274
Acid Content	mg KOH/g	< 1	ASTM D4662
NCO Content	%	30.5 – 32	ASTM D 2572
Water Content	%	< 0.1	ASTM D5155

Parameters of PU Foam

Property	Unit	Value	Test Method/Standard
Sanyol 3423/NCO/Cyclopentane*	(w/w)	100/130-140/10-12	Calculated
Mixing time	sec	10	-
Cream Time	sec	12 – 16	ASTM D7487
Gel Time	sec	55 – 65	ASTM D7487
Tack Free Time	sec	80 – 90	ASTM D7487
Free Rise Density	kg/m^3	23 – 26	ASTM D7487
Overall Density	kg/m^3	37 – 39	ASTM D1622

** The weight percentage of 141b gas is about 22-25%; † RH: Relative Humidity*

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