

# Baymer<sup>®</sup> AL 745

## General Properties and Applications

Baymer<sup>®</sup> AL 745 is the polyol component which contains HFC and water as the blowing agent. Together with the isocyanate Desmodur<sup>®</sup> 44 V 20 L it forms a polyurethane system that is used to form a rigid foam.

Applied in an appropriate way this foam meets the B3 (DIN 4102) fire requirements.

Typical data (no specification)	Property	Unit	Value	Method
	Specific gravity at 20°C	kg/m <sup>3</sup>	1138	Calculated
	Viscosity at 25°C	mPa.s	660	PET-10-01
	Colour		-	R-49
Packaging	Drum, IBC, Bulk			
Storage	Storage temperature		15 - 25°C	
	Storage Stability		06 months	

Store the materials in a dry well ventilated area out of the weather and direct sunlight and in compliance with local safety requirements.

## Labeling and REACH applications

This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently valid Safety Data Sheet.

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## Directions for Processing

Recommended mixing ratio	(volume parts):	(weight parts):
Baymer® AL 745	100	100
Desmodur® 44 V 20 L	100	109

Manual foam test	(internal lab. meth.; PET-55-02 20°C):
Start time:	25 ± 2 s
Gel time:	128 ± 7 s
Tack free time:	243 ± 28 s
Free rise density:	32.0 ± 1 kg/m³

These values are given only as a guide and must be verified in each individual case on finished parts manufactured under the processor's production conditions.

Machine	Medium- and high pressure machines
Component temperature	[°C] 18 - 23
Substrate temperature	[°C] >15
Air humidity	[%] <70

Baymer® AL 745 should be mixed with the isocyanate component, Desmodur® 44 V 20 L, with an appropriate machine and gun in the appropriate volumetric ratio. The density of the obtained foam depends on the actual conditions during the application process and on the pouring technique.

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## Safety precautions

Too thick or too heigh passes or to short time between passes could give foam scorching and foam fire due to the exothermic reaction.

The reaction product of Baymer® AL 745 with Desmodur® 44 V 20 L gives an organic combustible product. If exposed to fire and/or heat it may present a fire risk in certain applications. Do not use welding or cutting equipment, flame or any other ignition source on or immediatley adjacent to the exposed foam.

**Fire Hazard.** Fires involving either of these components or the final foam may be extinguished with carbon dioxide, dry chemical, or inert gas. Application of large quantities of water spray is recommended for spill fires. Personnel fighting the fire must be equipped with approved self-contained breathing apparatus.

## Fire performance test

The methods described in this publication for testing the fire performance of polyurethane and the results quoted do not permit direct conclusions to be drawn regarding every possible risk there may be under service conditions.

Furthermore, this does not release the producer of the finished parts from his obligation to carry out suitable tests on his end product with respect to the fire performance and/or fire risk in order to guarantee conformity with the required fire safety standard.

## Fluorinated Gases Regulation

This product contains fluorinated hydrocarbons, which are subject to EU Regulations No. 517/2014.

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance, information and recommendations to determine to your own satisfaction whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by Covestro. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

This product is not designated as „Medical Grade“ (1) and therefore shall not be considered a candidate for the manufacture of a medical device or of intermediate products for medical devices, which are intended under normal use to be brought into direct contact with the patient's body (e.g., skin, body fluids or tissues, including indirect contact to blood)\*. [This product is also not designated for Food Contact (2), including drinking water, or cosmetic applications. If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices, for Food Contact products or cosmetic applications Covestro must be contacted in advance to provide its agreement to sell such product for such purpose.] Nonetheless, any determination as to whether a product is appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or cosmetic applications must be made solely by the purchaser of the product without relying upon any representations by Covestro.

1) Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

2) As defined in Commission Regulation (EU) 1935/2004.

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