Bayer MaterialScience

Product Information

DESMOPHEN®651 MPA

Hydroxyl-Bearing Polyester

Description

Desmophen 651 MPA is a branched, hydroxyl-bearing polyester. Form supplied is approximately 65% in 1-methoxy-2propyl acetate (MPA).

Application

Desmophen 651 MPA is used primarily as a co-reactant with Desmodur® N 75. This combination results in coatings with excellent lightfastness, gloss retention and weather stability. It also exhibits very good resistance to chemicals and abrasion. As with any product, use of Desmophen 651 MPA in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

Product Specifications

Property	Value
Color, Hazen	≤ 100
Water content, wt. %	≤ 0.1
Hydroxyl content, %	5.5 ± 0.4
Viscosity @ 23°C, mPa s	14,500 ± 3,500
Acid Value, mg KOH/g	≤ 3
Non-volatile content, % (1g/1ml/125°C, convection oven)	65 ± 1

Typical Properties*

Property	Value
Equivalent wt.	Approx. 310
Density @ 20°C, g/ml	Approx. 1.11
Flash point	Approx. 40°C

Solubility

Desmophen 651 MPA is soluble in ethyl acetate, methyl ethyl ketone, methyl isobutyl ketone, methoxyhexanone, diacetone alcohol, 1-methoxy-2-propyl acetate, and methoxybutylacetate. However, the solutions formed must be tested for their storage stability. Butyl acetate is not suitable as the sole solvent. Desmophen 651 MPA is insoluble in aromatic and aliphatic hydrocarbons although it is possible to incorporate a certain proportion of aromatics, i.e., toluene or xylene, as thinners.

Only PU grade solvents should be used (< 0.05% water, free from other reactive impurities). Desmophen 651 MPA should not be thinned to below a non-volatile content of 30%. A lower solids content in some solvents may result in turbidity or flocculation.

** These items are provided as general information only. They are approximate values and are not part of the product specifications.*

Compatability

Generally speaking, Desmophen 651 MPA is miscible with the Desmodur and Desmophen grades listed. However, the combinations must be tested for their compatibility. Desmophen 651 MPA can be mixed with Desmodur N 75, N 100, N 3200, IL, L and BL 1265 and with Desmophen 650, 800, 1100 and 1200.

It has only limited compatibility with Desmophen RD 181, 1300, 670, A 365 and A 565. It is incompatible with Desmophen 1700, 1800, A 160, A 265, and A 450.

Storage

Desmophen 651 MPA should be stored in sealed containers at temperatures not exceeding 30°C. The shelf life is six months after receipt of material by customer.

Health and Safety Information

Appropriate literature has been assembled which provides information pertaining to the health and safety concerns that must be observed when handling Desmophen 651 MPA. For materials mentioned that are not Bayer products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer should be followed. Before working with any product mentioned in this publication, you must read and become familiar with available information concerning its hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms such as material safety data sheets and product labels. For further information contact your Bayer MaterialScience representative or the Product Safety and Regulatory Affairs Department in Pittsburgh, Pa.

Note: The information contained in this bulletin is current as of April 2010. Please contact Bayer MaterialScience to determine whether this publication has been revised.

Bayer MaterialScience LLC

100 Bayer Road • Pittsburgh, PA 15205-9741 • Phone: 1-800-662-2927 • www.BayerMaterialScienceNAFTA.com

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 and information to determine to your own satisfaction whether they 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 us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. 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 patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

Sales Offices

17320 Redhill Avenue, Suite 175, Irvine, CA 92614-5660 • 1-949-833-2351 • Fax: 1-949-752-1306
1000 Route 9 North, Suite 103, Woodbridge, NJ 07095-1200 • 1-732-726-8988 • Fax: 1-732-726-1672
2401 Walton Boulevard, Auburn Hills, MI 48326-1957 • Phone: 1-248-475-7700 • Fax: 1-248-475-7701

20810 4/10