

DMPA® Special

The key dispersing monomer for PUDs

Product Description

DMPA®, with the chemical name Dimethylolpropionic Acid, is a trifunctional compound of neopentyl structure containing two primary hydroxyl groups and one tertiary carboxyl group. In polyurethane dispersions, the benefit of DMPA® is that only small amounts are needed to create stable dispersions, resulting in excellent water resistance. DMPA® is a white crystalline material.

DMPA® Special is the DMPA product with the medium particle size for improved flow through pipes and valves as well as high rate of dissolution.

Segment Applications

Polyurethane dispersions as well as other water based systems (e.g. alkyds, epoxy and polyesters). Also used in solventborne alkyds and in various other resin technologies.

Delivery Forms

25 kg bags (35 bags per pallet); Easyopen bags EU only

500 kg Big bags

250 lb drums (US only)



Waterborne solvent free PUDs need to deliver not just low/no VOC solutions for coatings and adhesives but stable and precise performance properties within cost requirements. Our PUD building block products, such as DMPA®, give resin producers the flexibility to choose the exact properties required

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Sales Specification

| Characteristics | Unit | Specification |
|----------------------------------|------|---------------|
| Hydroxyl content | wt % | Min. 24.0 |
| Neutralization Equivalent | g/Eq | Max. 141.0 |
| Ash as Na ₂ O | wt % | Max. 0.03 |
| Water content | wt % | Max. 0.3 |
| Phthalic Color | APHA | Max. 250 |
| Particle Size > 40 Mesh (420 µm) | % | Max. 1 |

General Characteristics

| Characteristics | Unit | Typical Value ¹ |
|------------------|-------------------|----------------------------|
| Molecular Weight | g/mol | 134.1 |
| Acid Number | mg KOH/g | 410 – 415 |
| Bulk Density | kg/m ³ | 839 |
| Appearance | | Solid granules |

1. Typical values are for information only and not part of sales specification

Handling and Storage

Perstorp recommends storing DMPA® in sealed bags at ambient temperature, in a dry area protected from direct sunlight and the elements.

CAS No.: 4767-03-7
EC (EINECS) no.: 225-306-3
HS No.: 2918 19

Effective date: February 15, 2022

USERS ARE ADVISED TO MAKE THEIR OWN INDEPENDENT DETERMINATION OF THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE. EXCEPT FOR WHAT IS STATED IN PERSTORP'S GENERAL CONDITIONS OF SALE OR SEPARATELY IN A WRITTEN CONTRACT WITH PERSTORP, NO INFORMATION PROVIDED IN THIS DATA SHEET CONSTITUTES A WARRANTY (EXPRESS OR IMPLIED) BY PERSTORP, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.