



Technical Data Sheet

# DEUTERON MM 680

Compound of Matting Agents

**Deuteron**<sup>®</sup>  
ADDITIVES TO YOUR SUCCESS

## Product Characteristic

Density approx.	1.9 g/cm <sup>3</sup>
Oil absorption approx.	230 g Palatinol N/100 g (DIN ISO 787/5)
Particle size dv50 approx.	6.7 µm
Particle size dv90 approx.	13.9 µm
Appearance	fine white powder



## Product Description

Deuteron MM 680 is a synergistic compound of organic duromeric PMU powder (Polymethyl urea) with inorganic materials. It is particularly suitable as matting agent for solvent borne 2-pack PU top-coats. Deuteron MM 680 is free of waxes.

## Applications

Deuteron MM matting agents can be used in almost all coating applications ranging from water borne and solvent borne to 100% systems. They can be used as stand-alone additives or in combination with other materials to further improve their properties.

The use of Deuteron MM 680 especially improves the following properties:

- › Good matting effect
- › Very low influence on viscosity even at high application rates
- › High mechanical and chemical resistance
- › High scratch resistance and resistance to polishing
- › Temperature resistant up to over 200 °C, short-time up to over 300 °C
- › Pleasant touch felling
- › Improved blocking resistance
- › Insoluble in solvents commonly used in paints
- › Polymer content biodegradable

## Dosage

Typical addition range: 1%–10%

The required dosage level highly depends on the system (e.g. binder type, additives, solvent content) and application parameters such as layer thickness and film shrinkage. Thus, it is highly recommended to determine the needed addition level by a practical ladder study.



Technical Data Sheet

# DEUTERON MM 680

Compound of Matting Agents

**Deuteron**<sup>®</sup>  
ADDITIVES TO YOUR SUCCESS

## ■ Processing

The PMU chemistry in general is highly compatible in a wide range of systems. Due to that Deuteron MM matting agents can be incorporated easily by a high-speed stirrer without the need for specific wetting agents or dispersing aids. They are shear stable in high shear processes but should not be ground in a bead mill.

## ■ Storage Conditions

24 months at room temperature and dry conditions. Storage temperature should not exceed 35°C.

## ■ Package Sizes

Paper bag (10 kg net)

## ■ Safety

According to Regulation (EC) No. 1272/2008 Deuteron MM 680 is not classified as dangerous product and therefore does not need to be labelled.

For detailed information please refer to the Safety Data Sheet and Regulatory Information Sheet. The documents are also available on our website:

<https://www.deuteron.com/en/download-center/>

## ■ Deuteron: First class products for the coating industry

Deuteron GmbH successfully develops and sells innovative additives since 1977. Our product range consists of matting agents, anti-static additives, texturing additives, thickeners and UV initiators. In the course of our company history we have become an important partner of the national and international paint, lacquer and coating industry with sales agencies around the globe.

This leaflet intends to give technical advice without warranty and does not claim to be complete.



DEUTERON GmbH  
In den Ellern 2-4  
28832 Achim, Germany

Phone: +49 (0) 421 48 99 03-0  
Fax +49 (0) 421 48 99 03-60

Mail [contact@deuteron.com](mailto:contact@deuteron.com)  
URL [www.deuteron.com](http://www.deuteron.com)

© 10.20 EN  
081-122025