

**Product Characteristic**

Product version	MM 100	MM 110
Reactive solvent	DPGDA	DPGDA
Contains wetting agent	No	Yes
Specific weight approx.	1,06 g/cm ³	1,14 g/cm ³
Active content	17 %	25 %
Viscosity	3200 mPas	220 mPas
Particle size dv50 approx.	0,6 µm	0,6 µm
Particle size dv90 approx.	0,8 µm	0,8 µm
Particle size dv99 approx.	1,3 µm	1,3 µm
Percentage > 1 µm approx.	1,5 %	1,2 %
Appearance	greyish dispersion	white/yellowish dispersion

**Product Description**

Deuteron MM 100 and MM 110 are preparations of very fine PMU (Polymethyl urea) particles dispersed in DPGDA (dipropylene glycol diacrylate). The products are developed as matting agents especially for thin layer UV curable coatings and inks.

Depending on the addition level Deuteron MM 100 and MM 110 can be used as matting agents with comparatively high mechanical resistance for high quality applications.

Applications

Deuteron MM 100 and MM 110 are generally suitable in all UV curable applications where DPGDA is acceptable. Preferred applications are:

- › Overprint varnishes
- › Inkjet inks
- › Printing inks

The use of Deuteron MM 100 and MM 110 especially improve the following properties:

- › Good matting effect
- › Very low influence on viscosity
- › 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 (can range from "paper touch" to "soft feel")
- › Improved blocking resistance
- › Mimics wax effects without negative influence of waxes
- › Biodegradable polymer

Dosage

The required dosage level highly depends on the application and formulation (e.g. binder type, additives, solvent content, etc.) and 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 100 DEUTERON MM 110

Organic duromeric Matting Agents

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

■ Processing

The PMU chemistry in general is highly compatible in a wide range of systems. Due to that Deuteron PMH 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

Steel drum (25 kg net)
Steel drum (220 kg net)

■ Package Sizes

According to Regulation (EC) No. 1272/2008 Deuteron MM 100 and Deuteron MM 110 are classified as dangerous products and therefore 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.



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