

DEUTERON OG 8820, OG 8822, OG 8824

Surface additive, fine PMU particles as dispersions

Deuteron[®]
ADDITIVES TO YOUR SUCCESS

Product Characteristic

Deuteron	OG 8820	OG 8822	OG 8824
Specific weight	approx. 1.18 g/cm ³	approx. 1.18 g/cm ³	approx. 1.18 g/cm ³
Reactive solvent	TMP(EO) ₃ TA		
Active content	approx. 30 %	approx. 30 %	approx. 30 %
Particle size dv50	approx. 3.5 μm	approx. 2.8 μm	< 2.5 μm
Particle size dv99	approx. 12 μm	approx. 8 μm	< 7 μm
Appearance	white dispersions / pastes		



Product Description

The Deuteron OG 882x product family is a series of fine PMU (Polymethyl urea) particle dispersions in TMP(EO)₃TA (Ethoxylated Trimethylolpropane triacrylate). In the product family three different grades with different particle size distributions are available. The variety of different particle size distributions enable formulators to find the right particle size distribution for many different applications down to extremely thin films.

Depending on the addition level Deuteron OG 882x can be used as scratch resistance additive for high gloss applications or as matting agent for high quality applications.

The use of our PMU chemistry leads to high hardness, low COF (coefficient of friction) products that are able to maintain high gloss levels.

Applications

The Deuteron OG 882x family is generally suitable in all UV curable applications where DPGDA is acceptable. Preferred applications are:

- › Overprint varnishes
- › Floor coatings (PVC, laminate floorings and wood floors)
- › Wood coatings

The use of Deuteron OG 882x especially improves the following properties:

- › Reduced COF (coefficient of friction)
- › Surface protection
- › Scratch and polishing resistance
- › Low impact on the gloss level at low dosages
- › Matting at high dosages in thin layer applications
- › Pleasantly surface haptics
- › Excellent recoatability
- › Temperature resistant up to over 200 °C, short-time up to over 300 °C
- › Mimic wax effects without negative influence of waxes
- › Biodegradable polymer

Dosage

Typical addition range (high gloss): 1.0 % - 5.0 %

Typical addition range (as matting agent): 8 % - 25.0 %

The required dosage level highly depends on the system (e.g. binder type, additives, solvent content, etc.) 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

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■ Processing

Deuteron OG additives are easy to disperse and can be incorporated using a common high-speed stirrer. It is recommended to add Deuteron OG additives while stirring to avoid eventual agglomeration caused by concentration differences.

Because of their easy to use supply form the additives can be used as post-addable materials. Additional grinding should be avoided.

■ Storage Conditions

12 months at room temperature and dry conditions. Storage temperature should not exceed 35 °C. Stir well before use as phase separation can occur while storing.

■ Package Sizes

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

■ Safety

According to Regulation (EC) No. 1272/2008 Deuteron OG 882x 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 partners around the globe.

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



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