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# DEUTERON UV 3100

## UV initiator for cationic polymerisation

### / Chemical Description

Compound for cationic photopolymerization.

### / Physical Data

Appearance	red viscose liquid
Density	app. 1,1 g/cm <sup>3</sup>
Flash point	above 100° C
Concentration	app. 40% (active ingredient)
Reactive dil solvent	C12/C14 Glycidilether



### / Properties

The photoinitiator Deuteron UV 3100 hardens binder systems that polymerise cationically under UV exposure. Deuteron UV 3101 is soluble in these binder systems including the usual solvents and reactive diluents.

The start of polymerisation is initiated by exposure to UV light in the wavelength range of 220 to 250 nm. The maximum absorption is about 240 nm.

Its own colour disappears when it is exposed to light so that for all practical purposes there is not any impairment of colour by using Deuteron UV 3100.

The handling is unproblematic at a normal daylight. The initiator has the following benefits in relation to other initiators:

- no benzene emission
- only slight odour
- no heavy metals

Deuteron UV 3100 does not have a negative effect on film shrinkage because it contains no volatile solvents.

### / Application

Deuteron UV 3100 may be used as a UV hardener for all binding agents that can be cationically polymerised, in particular epoxides. Alkaline additives should be avoided because they impair the effectiveness of Deuteron UV 3100.

### / Dosage

Concentration of at least 1 % of Deuteron UV 3100 is recommended for technical applications. It may be necessary to use 5 % or more for special requirements. The higher the dosage, the greater the hardening speed without having to fear that the film becomes brittle.

If possible, radiation exposure should take place at intervals. This would have the consequence of improved energy utilisation with reference to the targeted final hardness.

### / Processing

Deuteron UV 3101 can be worked into the binding agent with a fast agitator or other agitating aggregates such as dissolvers without any problems.

### / Storage conditions

In original tightly closed containers under right storage conditions the product stability is up to 1 year. Do not expose to direct sunlight. Store at temperatures not under 10°C and, as possible, not over 35°C. Avoid contact with water.

### / Package Sizes

Plastic canister (20 kg net)

## **/ Safety Regulations**

According to Regulation (EC) No. 1272/2008 Deuteron UV 3100 is classified as a dangerous product and therefore needs to be labeled. For more information please consult the safety data sheet.

## **/ UV Initiators from our portfolio**

Deuteron UV 1240  
Deuteron UV 1242  
Deuteron UV 2257

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