

IsoQure® UR 500

N,N''-[4-methyl-m-phenylene]bis[N',N'-dimethylurea] / TDI Uron

CAS Number: 17526-94-2

Content: Approx. 80%

N,N''-[2-methyl-m-phenylene]bis[N',N'-dimethylurea] / TDI Uron

CAS Number: 17607-23-7

Content: Approx. 20%

Material Definition

Appearance: Off-white to tan powder

Melting Point, initial: Min. 176°C

Purity: Min. 95 %

Molecular Weight: 264, 3

Particle size < 10 µm: Min. 95 %

Volatile Matters: Max 1.0%

Application

Dicyandiamide hardeners offer excellent mechanical and electrical properties, good processing, and a long shelf life of finished epoxy resin formulations. However, the necessary curing temperatures of ~ 200°C are too high for most applications. IsoQure® UR 500 is a super-fine latent accelerator which reduces the necessary curing temperature significantly [above 130°C, short cure cycles are achieved] and does not sacrifice the shelf life of the compound. IsoQure® UR 500 is the most reactive UR accelerator. Applications extend from laminates for electrical circuit boards to powder coatings, from structural adhesives to high- tech carbon fibre composites.

Reaction

IsoQure® UR 500 decomposes under heat to form two NCO- [isocyanate-] groups and catalytically active dimethylamine. The dimethylamine accelerates the curing of the epoxy and the isocyanates react with epoxies to form additional linkages via oxazolidinones. IsoQure® 500 is more active than IsoQure® 200 or IsoQure® 300.

Handling, Storage and Packaging

The processing and use of IsoQure® UR 500 requires adequate technical and professional knowledge. Please consult safety data sheet and observe local safety regulations.

The legal requirements prevailing in your country, especially in the avoidance of accidents, working hygiene and patent rights must be observed.

IsoQure® UR 500 has to be stored in tightly sealed original containers in a cool and dry place below 28°C. Properly stored, the shelf life of IsoQure® UR 500 is 12 months after the date of delivery.

Standard pack size is 6 kg in boxes; 192 kg on a pallet.

Regulatory Information

EU REACH registered: Yes

Availability

- Americas [United States, Canada, South America]
- APAC [Asia-Pacific]
- ANZ [Australia, New Zealand]
- EU [European Union]
- PRC [People's Republic of China]
- UK [United Kingdom]

Disclaimer / Conditions

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Kautschuk Group does not accept any liability for damages incurred. Our general [Terms and Conditions](#) apply.

Stated storage and shelf life times are minimum guaranteed values for a period starting on the day of shipment. After this period has expired, the product requires additional quality control testing but may very well still be within specification. For more information, refer to our [Shelf Life Policy](#).

For updates on product information, please check this web page regularly:
<https://kautschuk.com/products/epoxy/ur/isoquire-ur-500>