

IsoQure[®] UR 300

Chemical name: 1,1-Dimethyl-3-phenylurea or 1-Phenyl-3,3-dimethylurea / Fenuron

CAS Number: 101-42-8

EINECS Number: 202-941-4

Material Definition

Appearance: Off-white to tan powder

Melting Point, initial: Min. 125 °C

Purity: Min. 98 %

Volatile Matters: Max. 1 %

Molecular Weight: 164,20

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 300 is a blocked 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.

Applications extend from laminates for electrical circuit boards to powder coatings, from structural adhesives to high- tech carbon fibre composites.

Use Cases

IsoQure® UR 300 decomposes under heat to form isocyanates and catalytically active dimethyl-amine. The dimethylamine accelerates the curing of the epoxy and the isocyanates react with epoxies to form additional linkages via oxazolidinones. IsoQure® UR 300 has a lower molecular weight and lower melting point than IsoQure® UR 200.

Handling, Storage and Packaging

The processing and use of IsoQure® UR 300 requires adequate technical and professional knowledge. Please consult the 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 300 has to be stored in tightly sealed original containers in a cool and dry place below 28°C. Properly stored it is stable for a minimum of one year.

Standard pack size for IsoQure® UR 300 is 6 kg in a carton; 240 kg on a pallet.

Regulatory Information

EU REACH registered: Yes

TSCA: Listed

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

Revision: 2021-05-19 / 5022



We strive to be accurate in all of our documentation. However, any information or advice is provided by us in good faith, without warranty or unlimited claim of fitness for a specific application. We sell to qualified industrial users only. The onus is on the product's user to research carefully and then to continually test the product and its application procedures within the context of its specific use. Use of our products and data requires diligence

and care, and is within the sole responsibility of the user. Kautschuk-Group does not accept any liability for damages incurred. Our general [Terms and Conditions \(/info/toc\)](#) 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 \(/info/shelflife\)](#).

For updates on product information, please check this web page regularly:
<https://kautschuk.com/products/epoxy/ur/isoquire-ur-300>
(<https://kautschuk.com/products/epoxy/ur/isoquire-ur-300>)

This page is also available in: **Deutsch**
(<https://de.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **Español**
(<https://es.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **Français**
(<https://fr.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **简体中文**
(<https://cn.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **Italiano**
(<https://it.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **Türkçe**
(<https://tr.kautschuk.com/products/epoxy/ur/isoquire-ur-300>), **日本語**
(<https://jp.kautschuk.com/products/epoxy/ur/isoquire-ur-300>).

© 2001-2024 Kautschuk Group · Isochem Limited · 340 Queen's Road,
Central, · Hong Kong, SAR

For inquiries, contact: [info@kautschuk.com \(mailto:info@kautschuk.com\)](mailto:info@kautschuk.com)

[Status \(/status\)](#) · [Policies \(/info\)](#) · [Privacy \(/info/privacy\)](#) · [Terms \(/info/toc\)](#) · [Imprint \(/info/imprint\)](#)