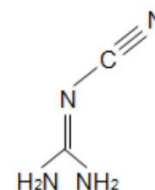


# TECHNICAL DATA SHEET

## DYHARD® 03

### Description:

DYHARD® 03 is a hardener for epoxy resins based on dicyandiamide which is specially made for the production of prepregs in the printed circuit board industry. The low turbidity gives storage stable prepregs free of crystallization.



DYHARD® 03 is qualified for the production of printed circuit boards according to the NEMA specification FR-3, FR-4, CEM-1 and CEM-3. Synonym: Cyanoguanidine, DCD, DCDA, Dicy CAS-No. [461-58-5]

### Specification:

Dicyandiamide assay	at least 99.5 %
Water content	max. 0.2 %
Water insoluble matter	max. 0.03 %
Melting point	209-212 °C
APHA	max. 40
Turbidity	max. 5.0 NTU

### Physical Properties:

Molecular weight	84.08
Specific gravity $D_{14}^4$	1.404 g/cm <sup>-3</sup>
Appearance	White, fine-crystalline powder

Alzchem Trostberg GmbH, Dr. Albert-Frank-Straße 32, 83308 Trostberg

#### Contact:

Bastian Berger  
Phone +49 8621 86-3402, Fax +49 8621 86-503402  
bastian.berger@alzchem.com / finechemicals@alzchem.com

This information and all technical and other advice are based on Alzchem's present knowledge and experience. However, Alzchem assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights or to laws and provisions. Alzchem reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. ALZCHEM DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SHALL HAVE NO LIABILITY FOR MERCHANTABILITY OF THE PRODUCT OR ITS FITNESS FOR A PARTICULAR PURPOSE (EVEN IF ALZCHEM IS AWARE OF SUCH PURPOSE), OR OTHERWISE. ALZCHEM SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. It is the customer's sole responsibility to arrange for inspection and testing of incoming products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

# TECHNICAL DATA SHEET

Solubility:	in g/100 g solvent at 20 °C			
	Water	3.2	Methoxyethanol	13.0
	Acetone	0.8	Ethoxyethanol	7.0
	Methanol	3.8	Methoxypropanol	6.4
	DMF 2	7.2	Methyl lactate	5.4

Packaging: 25 kg net paper bag (1000 kg or 1500 kg per pallet)

Storage Conditions: Two years shelf life. Normal warehouse conditions are sufficient, no special precautions are required. Single stacking is recommended. Caking is an inherent characteristic of dicyandiamide. Inappropriate storage conditions may quicken the caking process. Whilst this affects the physical condition it does not affect the chemical performance in any manner.

Stability: Dicyandiamide is stable in neutral aqueous solutions up to temperatures of 80 °C for a short time. The compound is not hygroscopic.

Alzchem Trostberg GmbH, Dr. Albert-Frank-Straße 32, 83308 Trostberg

Contact:  
Bastian Berger  
Phone +49 8621 86-3402, Fax +49 8621 86-503402  
bastian.berger@alzchem.com / finechemicals@alzchem.com

This information and all technical and other advice are based on Alzchem's present knowledge and experience. However, Alzchem assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights or to laws and provisions. Alzchem reserves the right to make any changes to information or advice at any time, without prior or subsequent notice. ALZCHEM DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SHALL HAVE NO LIABILITY FOR MERCHANTABILITY OF THE PRODUCT OR ITS FITNESS FOR A PARTICULAR PURPOSE (EVEN IF ALZCHEM IS AWARE OF SUCH PURPOSE), OR OTHERWISE. ALZCHEM SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND. It is the customer's sole responsibility to arrange for inspection and testing of incoming products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

**Edition: 01/2022 (This data sheet supersedes all previous data sheets for this product)**