

Green Chemicals Co., Ltd.

Address: No.6,DingLan Road, AoYang Industrial Park, FuNing,YanCheng, P.R.China Contact: Manager Jiang Tel: +86-515-87883661 E-mail:market@greenchem-china.com

Technical Data Sheet

Product Information:

Chemical Name	Dicyandiamide 99.5%		
Structure	N N N H NH2	CAS No.	461-58-5
		EC No.	207-312-8
Formula	C2H4N4	Molecular Weight	84.08

Specification:

Appearance	White crystal	Purity (%)	99.56
Ash Content (%)	0.032	Moisture (%)	0.26
Melting Point (°C)	209.1	Calcium Content (ug/g)	164

Application:

	1. As raw material of guanidine salt and cyanodiamine. Various guanidine salts can be produced by the reaction of dicyandiamide with acid. The phenylcyanodiamide obtained by the reaction of dicyandiamide and phenylnitrile is the intermediate of coating, laminate and molding powder.	
Application	2. Used as dye fixing agent, dicyandiamide resin prepared by reaction of dicyandiamide and formaldehyde can be used as dye fixing agent.	
	3. Dicyandiamide fertilizer and dicyandiamide compound fertilizer can control the activity of nitrifying bacteria, regulate the transformation rate of nitrogen fertilizer in soil, reduce the loss of nitrogen and improve the efficiency of fertilizer.	



4. As a fine chemical intermediate. In medicine, it is used to prepare guanidine nitrate, sulfonamide drugs, etc.; it is also used to prepare thiourea, nitrocellulose stabilizer, rubber vulcanization accelerator, steel surface hardener, artificial leather filler, adhesive, etc. 5-azacytosine, a pharmaceutical intermediate, was synthesized from dicyandiamide and formic acid.
5. This product is also used as rubber curing accelerator. It is also used

5. This product is also used as rubber curing accelerator. It is also used as raw materials for preparing guanidine salt, dye fixing agent, dicyandiamide fertilizer, sulfonamide drugs, thiourea, nitrocellulose stabilizer and steel surface hardening agent.

6. It can be used as latent curing agent of epoxy resin to prepare one-component epoxy adhesive, which can improve the mechanical and physical properties of the resin; the reference dosage is 4-12 phr, and the service life of 100g epoxy resin complex is 6-12 months. The curing condition is 160 $^{\circ}$ C / 30min, and the hot deformation temperature is 125 $^{\circ}$ C. The dicyandiamide resin prepared by reaction with formaldehyde can be used as fixing agent for direct dyes, post-treatment fixing agents for cotton and silk dyeing, starch additive for improving its fluidity, and nitrogen fertilizer additive for improving fertilizer efficiency. It is also used in the manufacture of adhesives, cyanodiamide, medicine, pesticide, dye, paint, explosive, synthetic detergent and guanidine salt. It can also be used as rubber vulcanization accelerator, steel surface hardener, paper flame retardant and mildew inhibitor.

For more detailed information please refer to the material safety data sheet.