

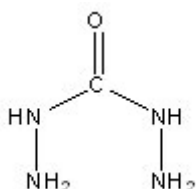
# Carbohydrazide

Alias: Hydrazine, 1,3-Diaminourea; Carbonic Dihydrazide

Molecular formula:  $\text{CO}(\text{NHNH}_2)_2$  CAS No. 497-18-7

Molecular weight: 90.09

## Molecular structure



## Properties

[Carbohydrazide](#) is white crystal powder. [Carbohydrazide](#) is very soluble in water and soluble in alcohol. [Carbohydrazide](#) decomposes on heating or exposure to uv to form ammonia, hydrogen, and nitrogen, which may be explosive with a blue flame when catalyzed by metal oxides and some metals such as platinum or raney nickel.

[Carbohydrazide](#) has dibasic and very reactive properties. [Carbohydrazide](#) is used as a component in jet fuels because it produce a large amount of heat when burned.

[Carbohydrazide](#) is used as rocket fuel. Carbohydrazide is used as an oxygen scavenger for water boiler feed and heating systems to prevent corrosion damage. [Carbohydrazide](#) is used as a reducing agent for the recovery of precious metals. [Carbohydrazide](#) is used as a polymerization catalyst and a chain extender in urethane coatings. Carbohydrazide is used as an auxiliary in photographic industry to prevent discolouration. [Carbohydrazide](#) is used as an intermediate for pharmaceuticals, stabilizers and water treatment chemicals.

[Carbohydrazide](#) and its derivatives are versatile intermediates. They have active applications in organic synthesis for agrochemicals, pharmaceuticals, photographic, heat stabilizers, polymerization catalysts, flame- retardants, blowing agents for plastics,

explosives, and dyes. Recently, hydrazine is applied to lcd (liquid crystal displays) as the fuel to make faster thin-film transistors.

## Specification

Items	Index
Appearance	White crystal powder
Purity, %	98.0min
Free hydrazine, ppm	500.0max
Moisture, %	0.2max
pH(12% water solution)	7.2-9.7

## Usage

When used as de-oxidant in boiler, put this product into water or use its water solution, the dosage of 0.5mol or above of [carbohydrazide](#) for 1mol O<sub>2</sub> is preferred. The suitable temperature range is 87.8-176.7°C. The reaction for [carbohydrazide](#) with O<sub>2</sub> is  $CON_4H_6 + 2O_2 = 2N_2 + 3H_2O + CO_2$

## Package and storage

25Kg/bag ,25Kg/fiber drum, customers' requirements.Storage for one year in shady room and dry place.

[top](#)

---

### Contact Us

**TEL:** +86-632-3671188

**E-mail:** [export@krchemical.com](mailto:export@krchemical.com)

**Website:** [kairuiwater.com](http://kairuiwater.com) | [krwater.com](http://krwater.com) | [krwater.net](http://krwater.net)

**ADD:** No.1, Fuqian South Road, Xuecheng Chemical Industrial Park, Xuecheng District,  
Zaozhuang City, Shandong Province, China