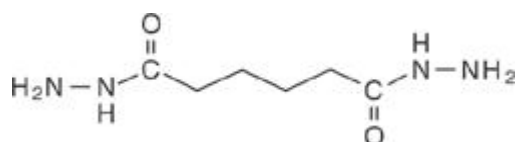


Product Data Sheet

Adipic acid dihydrazide(ADH)

Adipic acid dihydrazide (ADH) is a chemical compound commonly used in the synthesis of polymers, especially in the production of polyamide (nylon) and other materials. It is a hydrazide derivative of adipic acid, where the carboxyl groups of the adipic acid molecule are replaced with hydrazide groups (–NH–NH₂).



CAS No	:1071-93-8
ENCS	:(2)-865
TSCA	:1071-93-8
EINECS	:213-999-5

Features

ADH reacts very rapidly with ketone groups.

For example, it reacts easily with ketone groups of diacetone acrylamide or aldehyde groups of formaldehyde.

In addition, ADH also reacts with the epoxy group like an amino compound.

Applications

Room temperature crosslinkable waterborne coatings

Acryl emulsion comprising acryl monomers and diacetone acrylamide crosslinks with amino groups of ADH very rapidly.

The coating has excellent water resistance.

Formaldehyde scavenger

ADH reacts with formaldehyde and prevents volatilizing of formaldehyde in the air.

Epoxy resin hardener

ADH reacts with epoxy resin at high temperature and is useful for powder coating.

Reforming of plastic

Fiber processing

Properties

Appearance	White crystals
Formula	C ₆ H ₁₄ N ₄ O ₂
Mol. weight	174.2
Purity	Min. 98%
Loss on drying	Max. 0.4%
Melting Point	177–184°C
Solubility in Water	9.1 g/100 g water at 20°C
Specific Gravity	1.25 g / cm ³

Handling

Packing	20-kg carton box
Toxicity	Oral LD50 (rat) > 10,000 mg/kg