

### ADIPIC ACID DIHYDRAZIDE

#### **PRODUCT DESCRIPTION:**

Adipic Dihydrazide (ADH) is a distinctive crosslinking agent and curative that provides controlled reactivity and performance improvements in epoxy resins, polyurethane dispersions (PUDs), solvent-based polyurethanes (PURs), and emulsion acrylic resins. ADH finds major applications as a latent curing agent for B-stageable epoxy resins and as an ambient temperature crosslinking agent for high-performance acrylic emulsion architectural coatings. Materials crosslinked or cured with ADH demonstrate excellent colour stability, weathering resistance, adhesion, durability, hardness, and toughness.

### **PROPERTIES:**

Adipic Dihydrazide serves as a difunctional crosslinking agent in paints and coatings applied to specific water-based acrylic emulsions. Additionally, it acts as a hardener for epoxy resins and a chain extender for polyurethanes. Moreover, it finds a minor application as a formaldehyde scavenger, preventing the release of formaldehyde.

## **APPLICATION AREAS:**

Adipic Dihydrazide is used as a difunctional crosslinking agent in paints and coatings for certain water-based acrylic emulsions. It is used as a hardener for epoxy resins and a chain extender for polyurethanes. A small use is as a formaldehyde scavenger preventing the liberation of formaldehyde.

# IT IS APPLIED IN THE PRODUCTION OF:

- Crosslinking Agent for Polymers
- Elastomers and Rubber Industry
- Adhesives and Sealants
- Coatings and Paints
- Textile Industry
- Corrosion Inhibitors
- Biomedical Applications
- Photography
- Water Treatment
- Fuel Additives
- Polymer Modification



CHEMICAL PROPERTIES		
PURITY	≥ 99.0	
ACID CONTENT		
MOISTURE AMOUNT	≤0.5 %	
COLOUR (APHA)		
INHIBITOR		
PHYSICAL PROPERTIES		
APPEARANCE	White powder	
PHYSICAL STATE	Solid	
BOILING POINT	305°C	
FREEZING POINT	180°C	



SAFETY INFORMATION	
HAZARD PICTOGRAM(S)	
HAZARD STATEMENT(S)	H411 Toxic to aquatic life with long lasting effects.
PRECAUTIONARY STATEMENT(S)	P273 Avoid release to the environment.  P391 Collect spillage.  P501 Dispose of contents/ container to an approved waste disposal plant.
STORAGE CLASS	Storage class (TRGS 510): 11: Combustible Solids
STORAGE CONDITIONS	Tightly closed. Dry.  Recommended storage temperature -20 °C
DISPOSAL	No information
TRANSPORT INFORMATION	UN number:
	<ul> <li>UN proper shipping name:</li> <li>ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Adipohydrazide)</li> <li>IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Adipohydrazide)</li> <li>IATA: Environmentally hazardous substance, solid, n.o.s. (Adipohydrazide)</li> <li>Transport hazard class(es):</li> <li>ADR/RID: 9</li> <li>IMDG: 9</li> <li>IATA: 9</li> </ul>
	Packaging group:



• ADR/RID: III

• IMDG: III

• IATA: III

### **Environmental hazards:**

ADR/RID: yes

• IMDG Marine pollutant: yes

IATA: yes

For more information, check the SAFETY DATA SHEET or get contact with us.