

# Technical Data Sheet

## Eastman™ CHDM-D90

### Applications

- Automotive
- Construction chemicals
- General industrial coatings
- Lighting
- Paints & coatings
- Process additives
- Protective coatings
- Wind energy

### Key Attributes

- Excellent corrosion resistance in fiberglass-reinforced plastics
- Excellent hardness with some flexibility
- Good heat resistance and electrical properties
- High crystallinity
- High glass transition temperature relative to linear aliphatic glycols
- Highly reactive hydroxyl groups

### Product Description

IUPAC: 1,4-cyclohexanedimethano

Eastman™ CHDM-D90 is a 90/10 weight percent solution of CHDM-D in water. It is a liquid at room temperature for easier handling. This symmetrical, high molecular weight cycloaliphatic glycol is used to make saturated and unsaturated polyester resins. It is commonly used as a glycol modifier for resins containing Eastman NPG™ glycol. The 10 weight percent water in CHDM-D90 is removed during heating of the resin reaction mixture.

Good chemical, stain, humidity, and corrosion resistance is achieved when using CHDM-D90 in polyester-melamine baking enamels for appliance, general metal, and automotive coatings. It delivers good hydrolytic stability to waterborne polyester resins. Durable polyester polyols for polyurethane coatings can be made for the industrial maintenance, transportation, automotive, and aerospace markets. It can also be used in unsaturated polyester resins for gel coats, sheet molding compounds, and injection moldable fiberglass-reinforced plastics. Eastman™ CHDM-D90 is a mixture of cis and trans isomers.

Contact us for more information, to request a sample, or to receive a copy of Eastman publication, Storage and Handling of 1,4-Cyclohexanedimethanol (CHDM).

### Typical Properties

Property	Typical Value, Units
<b>General</b>	
Molecular Weight	144.21
Empirical Formula	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>
Equivalent Weight (calculated)	72.1
Hydroxyl Number (calculated, 100% solids)	778
Form	Slightly hazy liquid
Color Pt-Co	10 max. (molten)
Assay	88.0-90.5 wt % min.
Water	9.5-10.5 wt %
Boiling Point	113 °C (235 °F)
Viscosity @ 23°C	915 cP
Density	

@ 23°C	1043 g/L (8.71 lb/gal)
Specific Gravity	
@ 20°C/20°C	0.95
Melting Point <sup>a</sup>	-30 to 40 °C

<sup>a</sup>CHDM-D90 is a CHDM-D/water mixture exhibiting multiple melting points across this range. This complexity makes melting and freezing point determinations difficult. Eastman suggests CHDM-D90 be stored and handled at temperatures between +30°C to +40°C.

## Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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