

Product Data Sheet

Revision February 2011

D-Cure 1061

Product description

D-Cure 1061 is a polyaminoamide-epoxy adduct diluted with water which does not contain any cosolvent and which can emulsify liquid epoxy resins in water. **D-Cure 1061** can also be used in combination with aqueous solid resin dispersions.

Product applications

When **D-Cure 1061** is used at room temperature in combination with liquid epoxy resins or with solid epoxy resin dispersions, it provides properties similar to the ones obtained with equivalent solventfree or solventborne systems. Transparent or pigmented coatings exhibiting excellent mechanical and protective characteristics can be obtained at curing temperatures above 10°C.

D-Cure 1061 is typically used in the formulation of protective coatings (anticorrosion paints), in civil engineering or for substrate impregnation, where it can be diluted down to very low solids contents.

D-Cure 1061 usually provides excellent wetting characteristics, in particular of pigments and, for this reason and given its rheological characteristics, it is advised to pigment the curing agent component rather than the resin part. The formulation of waterborne systems is providing better results if the curing agent and the resin to be mixed together have a similar viscosity. It is therefore preferred to dilute the curing agent prior to mixing to a viscosity which is close to the one of the resin component.

When **D-Cure 1061** is used in combination with liquid resins, the end of pot life is well visible thanks to a sudden viscosity increase and is in the order of 2 to 3 hours. The pot-life can be extended by adding various products such as diluents or small amounts of organic solvents. These systems are used in particular in civil engineering applications such as floorings.

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Waterborne systems based on **D-Cure 1061** and solid epoxy dispersions such as E-Pos 1011W55 enable long gel times (up to 8 hours) combined with short drying times. Their excellent adhesion properties to numerous substrates and their good corrosion and chemical resistance render them suitable for use in concrete protection as well as for metal protection (anticorrosion paints).

Systems based on **D-Cure 1061** are advantageously used in places where solvent evaporation is not suitable, such as kitchens or hospitals, and show many advantages from a health and safety point of view (no solvents, decreased fire risk, etc).

Product characteristics

Viscosity @ 25°C	(mPa.s)	:	13000 – 23000
Gardner color		:	12 max
Solids content	(%)	:	50
HEW ^a (as supplied)	(g/mol H)	:	210

a HEW : Hydrogen Equivalent Weight (g/mol)

System characteristics

phr ^b with liquid resin	(EEW ^c = 190)	:	100 to 110
Gel time @ 23°C ^e		:	120 to 180 minutes
phr ^b with solid resin dispersion ^f	(EEW ^{c,d} = 480-560)	:	20 to 25
Gel time @ 23°C ^e		:	≥ 8 hours

- b phr : Parts per Hundred parts of Resin
c EEW : Epoxy Equivalent Weight (g/mol)
d For 100% solids resin
e Tecam gel time, 100 g mass
f For example E-Pos 1011W55