

# ACTAN®DU20 Curing Agent

## Product information

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### DESCRIPTION

**ACTAN®DU20** is an amine adduct in aqueous emulsion which is designed to optimise **wet adhesion** of two-component water-borne epoxy primers on non-ferrous substrates such as galvanised steel, aluminium and its alloys.

On these surfaces the dry-wet adhesion function of the primer is in principle even more important than the barrier function.

**ACTAN®DU20** with its specific amine functionality provides excellent wet and dry adhesion at a cross-linking degree of 100% on metallic substrates and maintains the necessary water barrier to ensure long term protection with solid and liquid epoxy resins.

### PERFORMANCE

**Safe pH** below 9.5 with solid and liquid epoxy resins at stoichiometric mixing rates preventing bubble formation and pinholing, mainly on weathered galvanised steel.

**Highest initial hardness** is obtained in formulations based on solid epoxy resins.

**Quicker film formation** is obtained in formulations with liquid epoxy resins that enables overcoatability with any other paint system after ± 2 hours at room temperature. **VOC-free high performance primers** can be formulated with liquid epoxy resins. Using solid epoxy resins, the VOC content will depend from the solvent content of the commercial epoxy resin but in no case an additional solvent will be necessary for film formation or in-can stability.

**Pot-life** is in the range of 24 hours at room temperature for solid epoxy resins and up to 6 hours when using liquid epoxy resins.

**Minimum drying time** between two coats of primer is ± 2 hours at room temperature. All films are **tack free** after evaporation of the water.

Overcoating with solvent based urethane-acrylic topcoat is possible within ± 2 hours. With water based glossy acrylic emulsions, the overcoatability varies from 2 to 20hrs. depending from the epoxy resin.

**ACTAN®DU 20** combinations with liquid epoxy resins provides the ability to develop VOC-free coating system for application on galvanised steel with long durability in various environments e.g. C5-I and C5-M tested in accordance with International Standard ISO 12944-6.

### TYPICAL PROPERTIES

Solids content % by weight.....	50
Viscosity Brookfield RVT 20rpm mPa.s.....	4000
H-equivalent-weight as supplied g/mol.....	2036
H-equivalent-weight on solids g/mol.....	1018
Specific gravity g/cm <sup>3</sup> .....	1.021
pH.....	9.3

### ADVANTAGES

- ✓ **Outstanding dry-wet adhesion on non-ferro metals.**
- ✓ **Tack free after evaporation of the water.**
- ✓ **Overcoatable within 2 hours.**
- ✓ **Ideal pH preventing surface reactivity, bubble formation and pinholing.**
- ✓ **Zero VOC systems.**
- ✓ **Good reactivity with liquid and with solid epoxy resins.**

### APPLICATIONS

Water based two component epoxy primer for non ferro-metals. Formulation suggestions are available on request.

### STORAGE LIFE

At least 12 months from the date of manufacture in the original sealed container at temperature between 5-35°C.

### HANDLING PRECAUTIONS

Refer to the Material Safety Data Sheet for ACTAN®DU20.