

TACorr G50

Polyoxyalkenyl derivate

Multi metal corrosion inhibitor

Product description & benefits:

TACorr G50 is a novel, polymeric corrosion inhibitor, offering multi metal protection, e.g. on alumina alloys, iron & steel, non ferrous metals, zinc and others. It was developed through a combined R&D project with Fraunhofer IFAM, Bremen.

TACorr G50 can be used as sole inhibitor. However it is a very good synergist, enhancing and complementing the effectivity of other inhibitor types like anti corrosion pigments (zinc phosphate) or organic inhibitors (acids, amides).

The thickness of the **TACorr G50** layer, when applied onto a surface, is approx. 10 nm only!

In addition, **TACorr G50** can perform as wetting agent, EP/AW additive, co-emulsifier of adhesion promoter.

Application & indications for use:

For the best performance the optimal dosage of **TACorr G50** Much more important is a proper blending and finest dispersion within a system. For this the following facts are important:

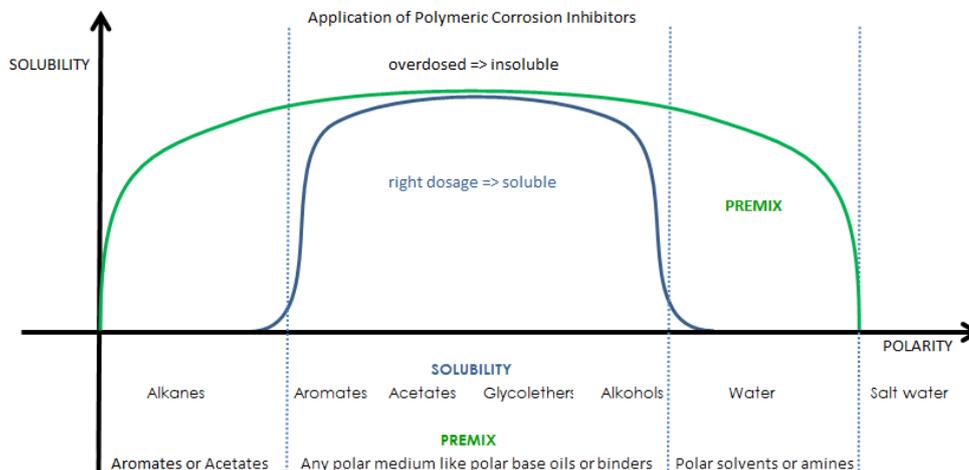
1) Polarity / solubility:

TACorr G50 is soluble in polar solvents / systems. This is not only taking in account the actual solvents itself but also all kind of products where such solvents are present / dominant in. In nonpolar systems (like white spirit or similar) it is not soluble, only through a premixing. This can be done by proper solvents or emulsifier. In aqueous systems **TACorr G50** is also not soluble. Here the blending can be done by proper solvents / emulsifier or by neutralization with alkaline (e.g. an amine).

Fields of applications:

- Paints & coatings, water borne, solvent borne, clear coatings and UV coatings.
- Metalworking, like oils, water miscible lubricants or fully synthetic coolants.
- Pigments / flakes of any kind like alumina, zinc or phosphates.
- Temporary corrosion protection (transport or storage).
- Detergents (aqueous or solvent borne).

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2) Water / pH:

In aqueous systems the pH value for proper blending has to be at 7,5 and higher. It is recommended to neutralize **TACorr G50** first with the amine / alkaline. After this the " **TACorr G50** – amine" premix can be added into the aqueous phase. Basically every amine can be used, the dosage is depending on the basicity.

3) Viscosity:

Because **TACorr G50** has a quiet high viscosity it can make the blending more difficult because it's harder to disperse evenly. So all measures taking this issue into account are good for the effectivity! As example a premix with proper solvents / emulsifier or blending at a production step with best solubility.

4) High TAC's know how:

Ask us for your dedicated applications!

TACorr G50 has a solid content of approx. 100 % and it contains no VOC.

Recommended dosages:

Paints & coatings:	1.0 % - 4.0 % (solid content)
Metalworking:	
-Concentrates:	1.0 % - 5.0 %
-Emulsion:	0.1 % - 0.5 %
Pigments / flakes:	Depends on specific surface
Temp. protection:	0.5 % - 1.0 %
Detergent:	0.1 % - 1.0 %

Properties & Specs:

Appearance:	brownish liquid
Odour:	special, mild
pH (0.5 %):	5.5 – 6.5
Density (20 °C):	1.02 – 1.04

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