

FINEAMIN PW70

POLYAMINES-BASED FILM-FORMING CORROSION INHIBITOR FOR STEAM TURBINE GENERATORS & CYCLOHEXYLAMINE-FREE APPLICATIONS

ADVANTAGES

- Innovative water-soluble FFA formulation, without neutralizing amines or polymers
- Suitable in steam turbine systems, for lower cationic conductivity contribution
- Long-lasting anticorrosion protection by surface-active filming polyamines
- Formation of a stable, thin and homogeneous magnetite layer
- Combination of ecologically harmless components in one solution
- Increased heat transfer leading to reduced energy consumption
- Reduction of blowdown water ratio due to organic salt-free components

MODE OF ACTION

FINEAMIN PW70 is a ready-to-use, pure film-forming amine (FFA) solution, containing no neutralizing amines or polymers. It was developed as an auxiliary product for steam turbine systems where cationic conductivity is a concern and requires strict control. As such, it can be part of all-volatile treatment (AVT) programs and is fully compatible with ammonia or other commonly used chemicals in such programs. Furthermore, it can be integrated into cyclohexylamine-free treatment approaches.

FINEAMIN PW70 forms a monomolecular protective film on metal surface, delivering superior corrosion protection throughout the entire water and steam cycle. The surface-active polyamines inside the composition facilitate the formation of a thin, stable and homogeneous magnetite layer that prevents the contact between the hydrophilic components and the metal without compromising thermal stability. Using salt-free FINEAMIN products leads to savings in water consumption, and due to the improved heat transfer, to reduced energy consumption. The performance of the whole plant is increased and the overall system protection is improved, while the costs of operation decrease significantly.

ENVIRONMENTAL COMPATIBILITY

FINEAMIN PW70 is ecologically and toxicologically harmless. Furthermore, it is almost entirely bio-degradable. For more details see EU safety data sheet.

APPLICATION AND DOSING

FINEAMIN PW70 generally gets injected in a single point of the plant, using an adequate dosing station. The required product quantity is calculated by the service engineer according to the water quality and the condition of the plant. The determination of the FINEAMIN excess can be done with a test kit or by using a photometric test.

DELIVERY

FINEAMIN PW70 is delivered as liquid solution in drums of 25 kg, 60 kg or 210 kg. For major customers, the product is available in standard containers of 1000 kg. In closed drums, with an ambient temperature range from 5°C to 45°C, it can be stored for up to 3 years.

PROPERTIES AND INFORMATION

PHYSICAL

Form:	Liquid, slightly turbid	Boiling point/range:	100°C
Colour:	Colourless to yellowish	Density at 20°C:	1 +/- 0.1 g/cm ³
Odour:	Characteristic	pH-value at 20°C:	11.5 +/- 1.5
Solubility in water:	Fully miscible	Vapour density:	nd
Melting point/range:	nd	Evaporation rate:	nd

ECOLOGICAL

Aquatic toxicity:	no relevant information available
Persistence and degradability:	more than 70% biodegradable