

# Fineamin 06 / 06 CPC

## POLYAMINES-BASED CORROSION AND SCALE INHIBITOR FOR WATER SYSTEMS FED WITH SOFTENED OR PARTIALLY / TOTALLY DEMINERALISED WATER

### ADVANTAGES

- Corrosion protection by surface active filming polyamines
- Dispersion and removal of existing corrosion products and deposits
- Formation of a stable, thin and homogeneous magnetite protection layer
- Alkalization of the whole water-steam circuit
- Prevention of calcium carbonate and other mineral salts deposits
- Combination of ecologically harmless components in one solution
- Neutralization of carbon dioxide also in steam and condensate
- Increasing heat transfer leading to reduced energy consumption
- Ecologically and toxicologically harmless, bio-degradable
- Reduction of blowdown water ratio due to organic salt free components

### MODE OF ACTION

**FINEAMIN 06** is a mixture of volatile, alkalizing film-forming polyamines and alkaline dispersing polymers. The surface-active polyamines enhance the formation of a thin, homogeneous magnetite protection layer with a very stable structure. This protection layer prevents the contact of the electrolyte with the metal surface without reducing the heat transfer. **FINEAMIN 06** protects the whole system, inclusive steam and condensate pipes, due to the high distribution coefficient of the alkalizing components and the volatile amines. The combination of surface-active polyamines, alkalizing polymers leads to a very effective protection against corrosion and scaling. Existing corrosion products and deposits get dispersed and removed gently. Using salt free **FINEAMIN** products leads to savings in water consumption and thanks to the improved heat transfer, reduced energy consumption. The performance of the whole plant gets increased, the overall system protection is improved, while the costs of operation will decrease.

### ENVIRONMENTAL COMPATIBILITY

**FINEAMIN 06** has been independently tested and confirmed as ecologically and toxicologically harmless by medical and hygiene institutes. Furthermore, it is almost entirely bio-degradable. For more details see EU safety data sheet.

### APPLICATION AND DOSING

**FINEAMIN 06** generally gets injected as diluted solution in a single point of the plant, using an adequate dosing station. The required quantity gets calculated by the service engineer regarding to the water quality and the condition of the plant. The dosing point for steam generation plants should be fixed into the feed water pipe after degasification and extracting attemperator spray water. The determination of the **FINEAMIN** amount can be analyzed by a test kit or using a photometric test.

### DELIVERY

**FINEAMIN 06** gets delivered as a liquid solution in drums of 30 l, 60 l or 210 l. For major customers, it is available in standard containers of 1000 kg. In closed drums, with an ambient temperatures from 5°C to 45°C, it can be stored until 5 years.

### PROPERTIES AND INFORMATION

#### PHYSICAL

|                            |                |                            |                           |
|----------------------------|----------------|----------------------------|---------------------------|
| Form: .....                | Liquid         | Boiling point/range: ..... | 100°C                     |
| Colour: .....              | Colourless     | Density at 20°C: .....     | 1+/-0.1 g/cm <sup>3</sup> |
| Odour: .....               | Characteristic | pH-value at 20°C: .....    | 12.5                      |
| Odour threshold: .....     | nd             | Vapour density: .....      | nd                        |
| Melting point/range: ..... | -10°C          | Evaporation rate: .....    | nd                        |

#### ECOLOGICAL

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Aquatic toxicity: .....              | no relevant information available |
| Persistence and degradability: ..... | 70% biodegradable                 |

# THE FINEAMIN PRODUCTS FAMILY



## FOR BOILERS / STEAM GENERATORS CLOSED LOOP COOLING OR HEATING

| PRODUCT NAME     | ACTIVE INGREDIENTS                     | TYPICAL USES   |
|------------------|--|--|
| FINEAMIN 06      | Polyamines & polymers                  | General boiler treatment, power plants <120 bars, refineries |
| FINEAMIN 06CPC   | Polyamines & polymers, concentrated    | Refineries, Industrial processes                             |
| FINEAMIN 06 SCAV | Polyamines, polymers, oxygen scavenger | Same as FINEAMIN 06. Use when high oxygen in feed            |
| FINEAMIN SCAV 35 | Oxygen scavenger amines                | Oxygen reduction < 120bars                                   |
| FINEAMIN 90      | Polyamines                             | Power plants > 120 bars                                      |
| FINEAMIN 24      | Polymers                               | Maintain high pH   |
| FINEAMIN 39F     | Polyamines, polymers                   | General boiler treatment for F&B application                 |
| FINEAMIN 29      | Polyamines, polymers, copper inhibitor | Closed cooling with copper                                   |

Available packaging, CP9 pallets: 30kg drum / 28 in pallet - 60kg drum / 8 in pallet - 210kg drum / 4 in pallet - 1'000kg IBC / 1 in pallet

## FOR OPEN COOLING

| PRODUCT NAME               | ACTIVE INGREDIENTS                     | TYPICAL USES   |
|----------------------------|--|--|
| FINEAMIN 47                | Film-forming amines, polymers          | Corrosion and scale inhibitor                        |
| FINEAMIN 91                | Polycarboxylic acid, phosphonic acid   | Corrosion and scale inhibitor                        |
| FINEAMIN 98P               | Polycarboxylic acid, low-P formulation | Scale inhibitors for stressed calcium carbonate zone |
| FINEAMIN 95T               | Environmentally friendly phosphates    | Corrosion and scale inhibitor                        |
| FINEAMIN 80-CT             | Biofouling cleaner and protection      | Replacement for oxidizing biocides                   |
| FINEAMIN FINALGA ME        | Isothiazoline                          | Biocide  |
| FINEAMIN FINALGA 25        | Quaternary ammonium                    | Biocide  |
| FINEAMIN Biodispersant BOD |  | Biocide  |

Available packaging, CP9 pallets: 30kg drum / 28 in pallet - 60kg drum / 8 in pallet - 210kg drum / 4 in pallet - 1'000kg IBC / 1 in pallet



## HYDROPHOBIC FILM FORMING POLYAMINES

