



FORKAL PLUS

Scale inhibitor with sequestering and suspension action for industrial waters

FEATURES

Forkal Plus carries out a double function: in addition to be a sequestering agent, it boasts remarkable suspension properties.

Forkal Plus is anti-corrosive, protecting the surfaces from chemically aggressive waters. No scales are formed by adding **Forkal Plus** to water, also of significant hardness; in most case, limescale turns into inert flocculated sludge that does not stick to the surfaces. This flocculated sludge is easily removed through purging operations.

Forkal Plus activity is not only preventive, in facts its active principles act on the compounds determining the water hardness, such to solubilize any incrustations.

Forkal Plus boasts sludge removing properties when used in old hot water heating circuits.

- Always clean heat exchange circuits and surfaces
- Old scales can be removed without stopping the systems' operation
- It improves the systems' performances with remarkable saving
- Doses can be monitored through a user-friendly analytical kit.

METHODS OF USE

It can be dosed manually or preferably, through an impulse dosing system.

Concentrations of use as scale inhibitor:

Water hardness in °F	Forkal Plus concentration in gr/m ³
1-20	200
21-40	250
41-60	400
Over 61	400 + 3.5 gr/m ³

To remove existing incrustations, add at least 500 gr/m³ to the amounts indicated in the table.

PHYSICAL- CHEMICAL DATA

Aspect: liquid, clear

Colour: straw-yellow

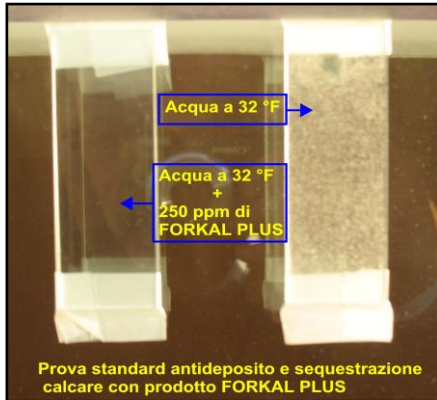
pH (1% sol.): 9

Density (20°C): 1.09

Solubility in water: 100%

LABORATORY TESTS FOR THE PRACTICAL EVALUATION OF FORKAL PLUS PROPERTIES

TEST TO EVALUATE THE SCALE INHIBITING POWER



Test method:

Hard water was poured in a first beaker at 32°F and the same quantity of water was poured in a second beaker, adding 250 ppm (mg/l) of Forkal Plus. A clean microscope slide was immersed in both specimens. The specimens were put inside a heater blowing heat at 80°C for 8 hours. The slides, once cooled, were rinsed with demineralised water and visually examined.

Test results:

The slide immersed in hard water is completely contaminated by limescale while the slide immersed in water with Forkal Plus is perfectly clean and free of any saline residue.

Image:

Water at 32°F

Water at 32°F + 250 ppm of Forkal Plus

Standard anti-scale and limescale sequestering test using FORKAL PLUS.

TEST TO EVALUATE THE ANTI-CORROSIVE POWER



Test method:

A water solution was prepared with a content of chlorides equal to 550 ppm (mg/l). The solution was proportioned and increasing concentrations of Forkal Plus from 0 ppm to 400 ppm were added to the test solutions.

Small plates obtained by a regular sheet C40, previously degreased and mechanically deoxidized were immersed in the test solutions. The test was carried out for 24 hours inside a

heater blowing heat at 50°C.

Test results:

The entity of damage caused to the surfaces clearly decreases by increasing the concentration of Forkal Plus in the highly corrosive solution.