

AQUATOR ACI-301

Vegetable oil based, and water soluble oil dispersible corrosion inhibitor

DESCRIPTION

AQUATOR ACI-301 is a surface active corrosion inhibitor with enhanced absorption and adhesion properties when it is used during well intervention in coiled tubing, and other oil and gas well works. The anti-corrosion characteristic of this product is due to the protective chemical barrier formation which minimizes or inhibits corrosive gases, such as H₂S and CO₂, penetration into the metal surface. AQUATOR ACI-301 could be applied either diluted or concentrated in batch treatment.

CHARACTERISTICS

- Derived from vegetable oils
- Capable of protective film formation
- Excellent corrosion protection against sour gas
- Compatible with other drilling additives
- Water soluble, and oil dispersible
- Injectable to the drilling well in batch treatment

APPLICATION

AQUATOR ACI-301 is mainly used in oil, gas, and petroleum industries to give protection in carbon steel equipment against sour gases.

DOSAGE

Upon process type and corrosion level, AQUATOR ACI-301 effective dosage varies from 20 to 50 ppm in well intervention.

INJECTION

During well operation in batch treatment, it is regularly closed, and opened and a specific amount of AQUATOR ACI-301 is injected to the well. As the aim is to minimize or inhibit corrosion, closings and openings should be regulated carefully to facilitate protective film formation.



PHYSICAL AND CHEMICAL PROPERTIES

Physical State at 20(°C)	Slightly viscous liquid
Appearance	Light to dark brown
Density (g.cm-3)	0.9±0.1
Kinematic viscosity at 25(°C) (mm ² .s ⁻¹)	46.5±0.5
Freezing point(°C)	-30±5
Pouring point(°C)	<0
Flash point (Open cup) (°C)	128 ± 5
Solubility	Water soluble & oil dispersible
Purity (%)	≥30

TYPICAL PERFORMANCE

Emulsion formation in various concentrations of AQUATOR ACI-301 at 60°C after one day	25 mg.lit ⁻¹	Non
	50 mg.lit ⁻¹	Non
	100 mg.lit ⁻¹	Non
Corrosion protection of 30 ppm solution of AQUATOR ACI-301(%)	99	
Corrosion protection of 20 ppm solution of AQUATOR ACI-301(%)	97	
Corrosion rate (mpy)	Blank	62
	30 ppm solution of AQUATOR ACI-301	0.7
	20 ppm solution of AQUATOR ACI-301	2

PACKING

AQUATOR ACI-301 is available in 200 kg drums.

STORAGE & SHELF LIFE

The shelf life is 12 months if unopened, stored free from frost, moisture and direct sunlight.



HEALTH & SAFETY

This product is Flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
 - 2-Use fresh air masks and explosion proof equipment.
 - 3- Prohibit all flames, sparks, welding and smoking.
- MSDS is available at ABADGARAN website.

TECHNICAL SERVICE

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.



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