

Technical Data Sheet

ICC- O₂ Scavenger (A)

ICC-O₂ Scavenger is concentrated blend of liquid catalyzed oxygen scavenger used for corrosion control of water-based fluids. Application include oxidative corrosion control in down-hole tubular and reduction of the condition that promote thermal degradation of organic materials. It is suitable for use in freshwater and brines.

ICC-O₂ Scavenger is a formulated sulphite-based chemical in liquid form used to scavenge oxygen. It reacts with and eliminates dissolved oxygen as a possible source of corrosion in drilling mud systems.

ICC-O₂ Scavenger can be used in all freshwater and saltwater drilling fluids.

Typical physical properties

CHARACTERISTIC	STANDARD	Test Method
Physical appearance	Colorless to Light Yellow Liquid	
pH (5% solution)	5-6	ASTM D-1172
Sp.Gr @25 °C (g/ml)	1.2 ± 0.02	ASTM D-1298
Viscosity @ 25 °C (Cps)	< 60 Cps	ASTM D-445
Pour Point (°C)	≤ -8	ASTM D-97
Boiling Point (°C)	≥ 100	
Solubility in Water	Completely Soluble	

Applications

- Helps remove soluble oxygen from water in order to reduce corrosion rate.
- It also acts as a polymer extender ensuring the efficacy of polymers in high temperature and pH environments.
- ICC-O₂ Scavenger acts as a sacrificial oxygen scavenger and prevents corrosion

Advantages

- Minimize oxygen corrosion cell formation.
- Extends thermal stability of organic polymers.

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- Can be added directly to the fluid system.
- It is highly miscible in water.
- ICC-O₂ Scavenger eliminates corrosion due to dissolved oxygen.
- ICC-O₂ Scavenger reduces the possibility of drill pipe failure such as twist-offs, washout and rig equipment maintenance cost.
- ICC-O₂ Scavenger increases the life of pump parts as well as the drill string, casing strings and production tubing.

Recommended Treatment

- The dosage of treatment is highly depends on the oxygen concentration of water.
- Regulate treatments by maintaining sulfite residuals of 20-60 mg/l in water systems.
- Considering make-up streams, the final injection dosage will be adjusted in accordance with laboratory and field tests.
- Inject liquid ICC-O₂ Scavenger at controlled rates directly into the pump section.

Packaging and Storage

ICC-O₂ Scavenger is packaged in 200 kg polyethylene or steel drums. Customized packaging is also available on request. Keep the containers closed when not in use.

Material Compatibility

AVOID contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, per chlorate, concentrated oxygen, and permanganate). AVOID Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, and sulfonic).