





# S-11/S-11 Org

#### **PRODUCT DESCRIPTION**

S-11/S-11 Org are corrosion inhibitors for aqueous systems with low pH level. S-11 is a proprietary blend of acetylenic alcohols, salts of quaternary amines and nonionic surfactants. S-11 Org is a proprietary blend of salts of alkyl pyridines.

S-11/S-11 Org are suitable replacements for propargyl alcohol. They are less toxic and more environmentally acceptable.

Addition of these products in proper concentrations to the acidic solutions provide corrosion protection during whole operation process.

# **FEATURES**

- Economical
- Safe to use
- Environmentally safe
- Multimetal protection
- Miscible with most hydrocarbons
- Replacement for propargyl alcohol

# **APPLICATION**

S-11 prevents corrosion in mineral acids, such as nitric, hydrochloric, sulfuric, sulfonic and phosphoric. S-11 Org is especially effective in organic acids such as acetic, citric, formic, tartaric, also in sulfamic, phosporic acids, and EDTA. S-11/S-11 Org do not affect the pH level so it will not affect the technological processes. Usually, S-11/S-11 Org are used at concentration level of 0.1-1.0% by weight on total formula, and can be post-added if desired.

The concentration of inhibitor required depends on the concentration of the acid and operation conditions. In general, S-11/S-11 Org are effective at low concentrations, but at temperatures over 200°F (93°C), higher concentrations of S-11/S-11 Org corrosion inhibitors may be needed (0.50-1.0% for S-11 and 1-4% for S-11 Org). However, the most effective concentrations are best determined by laboratory tests.

#### **TYPICAL APPLICATIONS**

Examples of applications include acid pickling, chemical cleaning, additive for water-based coatings, and inks have a pH less than 5.

# **PHYSICAL PROPERTIES**

Property	S-11	S-11 Org
Appearance	Clear dark brown	Opaque dark
	liquid	brown liquid
Flash point, TCC	78°F (26°C)	N.E.
Odor	Mild	Pungent
Pour Point	<-40°F (-40°C)	N.A.
Density	7.8 - 8.0 lb/gal	9.4-9.5 lb/gal
	(0.96 – 0.98 kg/l)	(1.13-1.15 kg/l)

#### **PACKAGING**

S-11 and S-11 Org are available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes and bulk.



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