



VpCI® FORMULATED PRODUCTS FOR PROCESS INDUSTRIES



# S-11/S-11 Org/S-11P

## PRODUCT DESCRIPTION

S-11/S-11 Org are corrosion inhibitors for aqueous systems with low pH levels. 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.

S-11 Org is also available in powder form S-11P. This powder is especially useful in sulfamic acid solution.

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

## FEATURES

- Economical
- Environmentally friendly
- Multi-metal protection
- Miscible with most hydrocarbons
- Replacement for propargyl alcohol

## APPLICATION

S-11 prevents corrosion in mineral acids, such as nitric, hydrochloric, sulfuric, and phosphoric.

S-11 Org is especially effective in organic acids such as acetic, citric, formic, tartaric; also in sulfamic, phosphoric acids, and EDTA.

S-11/S-11 Org does not affect the pH level so it will not affect the technological processes. Usually, S-11/S-11 Org are used at a concentration level of 0.1-1.0% by weight of 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 that have a pH less than 5.

## PHYSICAL PROPERTIES

Property	S-11	S-11 Org	S-11 P
Appearance	Clear dark brown liquid	Opaque dark brown liquid	Off white powder
Flash point, TCC	106°F (41°C)	N.E.	N.E.
Odor	Mild	Pungent	N.E.
Pour Point	<-40°F (-40°C)	N.A.	N.A.
Density	8.5-8.7 lb/gal (1.02-1.04 kg/l)	9.45-9.5 lb/gal (1.13-1.15 kg/l)	N.A.
pH	N.E.	1-2 (neat)	N.E.

## PACKAGING

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

S-11P is available in 5 lb (2.3 kg), 50 lb (22.7 kg), and 100lb (45.4 kg) packages.



**FOR INDUSTRIAL USE ONLY  
KEEP OUT OF REACH OF CHILDREN  
KEEP CONTAINER TIGHTLY CLOSED  
NOT FOR INTERNAL CONSUMPTION  
CONSULT SAFETY DATA SHEET FOR MORE  
INFORMATION**

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