

## INTRODUCTION

MAYCO STIM-50 is a clear nonionic surfactant which will reduce the surface tension of water, brine, or acid based stimulation fluids and form micro emulsions of these fluids with oils.

## TECHNICAL FEATURES

1. MAYCO STIM-50 is very effective in breaking down perforations when used in hydrochloric acid. This can be useful in both carbonate and sandstone formations.
2. MAYCO STIM-50 has no adverse effects on corrosion inhibitors.
3. MAYCO STIM-50 provides for low surface and interfacial tension values results in increased penetration of acid for stimulation, resulting in increased production.
4. Because of MAYCO STIM-50's low interfacial tension, a lower pressure is necessary to pump acid into the formation.
5. MAYCO STIM-50 may be used in all current acid systems up to temperature of 225°F.
6. MAYCO STIM-50, as an aid in breaking down perforations ahead of fracturing, gravel packing or acidizing treatments, may be used in regular acid and HC acid or Fe acid.

## SUGGESTED APPLICATIONS

MAYCO-STIM-50 was developed primarily for use in hydrochloric acid systems to aid in breaking down perforations ahead of fracturing, gravel packing or matrix acidizing treatments. MAYCO-STIM-50 can be used in oil, gas or water wells at the rate of two to five gallons per thousand gallons of fluid.

When used in the treatment of oil reservoirs, compatibility testing should be performed to determine if additional nonemulsifier will be required.

MAYCO STIM-50 may be used to remove damage and increase near wellbore permeability in zones where fracturing would increase water reduction and may also be used to increase acid penetration into wells with low bottom-hole temperatures and low gravity crudes.

## PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear colorless liquid
Odor	Strong
pH	8
Flash Point °C (°F)	57 (134)
Boiling Point °C (°F)	81 (178)
Specific Gravity	0.9
Solubility in Water	Emulsifiable, slightly soluble
Ionic Character	Nonionic
Surface Tension dynes/cm (1%)	28.0
Interfacial Tension dynes/cm (1% w/heptane)	Less than 1.0

## COMPATIBILITIES

MAYCO STIM-50 is compatible with all mineral acids, brines, and organic acids.

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