

## NE-10

### Broad Spectrum Nonionic Non-Emulsifier

#### Product Overview

NE-10 is a nonionic acid non-emulsifier designed for application in acidizing and fracturing operations. NE-10 effectively breaks water blocks and prevents or removes crude oil in water or acid emulsions. NE-10 functions by reducing the interfacial tension between brines or acid and crude oils. The product has proven to have broad spectrum performance in a wide variety of crudes throughout the world. NE-10 may also be used in the spearhead of acidizing and fracturing treatments to lower the break down pressures and minimize the possibility of forming water or acid/oil emulsions.

#### Recommended Application

In acidizing treatments NE-10 is typically applied to the acid during loading operations at rates of 2 to 5 gallons per thousand gallons of acid. When applied in matrix squeeze treatments NE-10 is mixed in water brine or alcohol at a load rate of 1 to 2 gallons per barrel of fluid.

#### Safety & Environmental

Flammable Liquid, N.O.S, 3, UN-1993, PGIII  
(Contains Isopropanol Solution)

#### Usage and Treatments

Specific load rates vary according to the type of treatment being performed, emulsifying characteristics of the oil encountered in the formation, the treating fluid and the quantity of solids generated during acidizing. Pilot testing is recommended with the test fluids to determine the optimum usage rates for specific treatments.

#### Typical Properties

Property	Results
Appearance	Light Yellow Liquid
Density	7.89
Water Requirements	0.4 to 0.5 gal/sk
pH(10% solution)	6.5-7.5
Pour point	-30F
Ionic Charge	Nonionic
Solubility freshwater	yes
Solubility Hydrocarbon	yes
Solubility 15%HCL	dispersable

#### Shipping, Handling & Storage

Packaged in 55 Gal. drums Shipped from our plant in Houston.