

## **OIL AID-IS-5**

### **IRON STABILIZER**

#### **DESCRIPTION**

OIL AID-IS-5 is an iron stabilizing agent which is especially useful in oilwell acidizing treatments. OIL AID-IS-5 stabilizes nine times more iron than typical iron sequestrants such as citric acid. Its typical properties are:

Form	White, granular solid
Melting Point	78.8°C
Solubility @ 25°C (g/100 ml)	Water 43.0
Methanol	18.0
pH, 10% sol'n @ 25°C	2.1

#### **APPLICATION**

OIL AID-IS-5 should be used when acidizing formations which contain iron minerals or when iron scale is present in pipe or tubing. Due to the presence of iron scale or corrosion products inside the tubulars, iron stabilizers should be used in all acid treatments.

Acid pumped into a well dissolves rust, iron scale and iron-bearing formation minerals.

Iron remains in solution until the acid is spent and the pH of the system increases. As the pH increases to between 1.5 and 2, the ferric ion (+3), which normally accounts for about 20% of the total iron content, precipitates as ferric hydroxide. Ferric hydroxide is a shiny gelatinous mass which can plug formation permeability, reducing production. OIL AID-IS-5 prevents ferric hydroxide by reducing ferric (+3) ions to the ferrous (+2) form.

Ferrous hydroxide does not precipitate below a pH of 7.7 and since spent acid rarely reaches maximum of 5.3, ferrous hydroxide is rarely a problem.

#### **RECOMMENDED**

OIL AID-IS-5 dosage should be based on amount of total iron to be encountered in the treatment. OIL AID-IS-5 at a concentration of 2400 ml/L will stabilize 6000 ml/L of total iron at temperatures up to 400°F (204°C).

For every 3000 ppm total iron 10 lb (1.20 kg/m<sup>3</sup>) of OIL AID-IS-5 per 1000 gallons of acid is used.



## HANDLING

OIL AID-IS-5 is a non-hazardous, non-toxic biodegradable material which is a mild irritant.

## PACKAGING

OIL AID-IS-5 is available in 50 lb (25 kg) bags.

OIL AID-IS-5 is a Messina trademark

