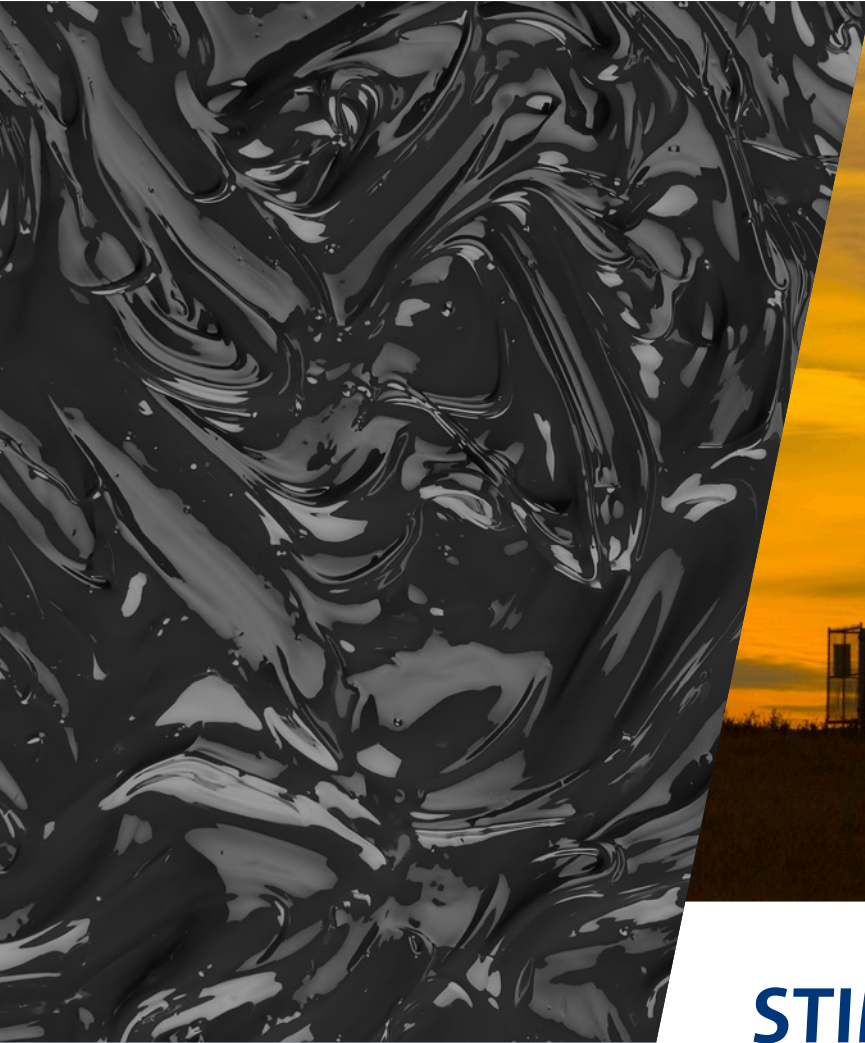


Connecting**Chemistry**



# **STIMULATION CHEMICALS**

Acidizing

# ACIDIZING CHEMICALS



## CORROSION INHIBITORS AND INTENSIFIERS (BRENNTACOR...)

### BRENNTACOR 6115

- cost effective product dedicated for temperatures below 60°C (140°F)
- typical concentration range: 1-20 gpt (1-20 L/m<sup>3</sup>)

### BRENNTACOR 6120 LF

- non-volatile acid corrosion inhibitor dedicated up to 120°C (248°F)
- above 100°C (212°F) must be used with corr. intensifier Brenntacor Aid 10
- typical concentration range: 1-30 gpt (1-30 L/m<sup>3</sup>)

### BRENNTACOR 6125

- dedicated for medium temperatures up to 130°C (266°F)
- can be used up to 120°C (248°F) without intensifier
- typical concentration range: 1-30 gpt (1-30 L/m<sup>3</sup>)

### BRENNTACOR 6120 HT

- premium product for HT applications up to 150°C (302°F)
- must be used in combination with Brenntacor Aid 20
- typical concentration range: 5-20 gpt (5-20 L/m<sup>3</sup>)

### BRENNTACOR AID 10

- metallic iodide salt
- dedicated for usage in combination with Brenntacor 6120 LF and Brenntacor 6125
- typical concentration range: 8-40 ppt (1-4,8 kg/m<sup>3</sup>)

### BRENNTACOR AID 20

- dedicated for usage in combination with Brenntacor 6120 HT
- not compatible with DDBSA and its derivatives
- typical concentration range: 10-20 gpt (10-20 L/m<sup>3</sup>)

## ANTI-SLUDGE AGENTS (TN-AS...)

### TN-AS 10

- anionic based
- contains in-built iron reducing package
- typical concentration range: 5-25 gpt (5-25 L/m<sup>3</sup>)

### TN-AS 60

- cationic
- dedicated for usage in combination with Brenntacor 6120 HT
- typical concentration range: 5-25 gpt (5-25 L/m<sup>3</sup>)

## IRON CONTROL (TN-IRON...)

### TN-IRON 10

- iron reducing agent
- specialized product – blend of different compounds
- typical concentration range: 5-30 gpt (5-30 L/m<sup>3</sup>)

### TN-IRON 11P

- erythorbate compound
- iron reducing agent
- typical concentration range: 2-15 ppt (0,2-1,8 kg/m<sup>3</sup>)

### TN-IRON 20

- iron sequestering agent
- typical concentration range: 20-45 gpt (20-45 L/m<sup>3</sup>)

### TN-IRON 70

- iron sequestering agent
- dedicated for HT applications
- typical concentration range: 10-30 gpt (10-30 L/m<sup>3</sup>)

## NON-EMULSIFIERS (TN-NE...)

### TN-NE 10

- anionic based
- more efficient alternative than DDBSA
- typical concentration: 1-5 gpt (1-5 L/m<sup>3</sup>)

### TN-NE 30

- nonionic based
- universal agent, compatible with most of chemicals offered
- typical concentration: 1-5 gpt (1-5 L/m<sup>3</sup>)

## SURFACTANTS (TN-IFT/FBK...)

### TN-FKB 50

- micellar additive
- reduces interfacial tension and capillary pressures
- shows anti-emulsifying properties
- leaves a formation water-wet
- concentration range: 0.5-2.0 gpt (0.5-2.0 L/m<sup>3</sup>)
- applicable for acidizing and fracturing

### TN-IFT 30

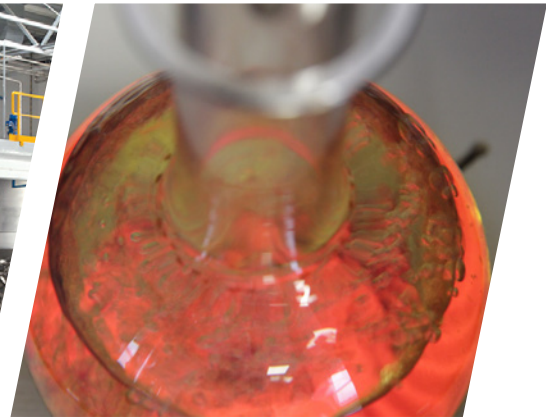
- nonionic formula
- reduces interfacial tension below 5 mN/m with most of crude oils
- efficient surface tension reducer
- recommended concentration: 1-5gpt (1-5 L/m<sup>3</sup>)

## CLAY CONTROL (BRENNTAHIB...)

### BRENNTAHIB P30

- permanent clay stabilizer
- high temperature stability
- low formation damage
- concentration range: 1.0-3.0 gpt (1.0-3.0 L/m<sup>3</sup>)
- applicable for acidizing and fracturing

# ACIDIZING CHEMICALS



## CLAY CONTROL (BRENNTAHIB...)

### BRENNTAHIB CL75

- temporary clay stabilizer
- choline chloride based
- applicable to acidizing and fracturing fluid systems
- concentration range: 1.0-3.0 gpt (1-3 L/m<sup>3</sup>)

### BRENNTAHIB F60

- fines stabilizer
- organosilane based
- recommended concentration is up to 20 gpt (20 L/m<sup>3</sup>), can be added to a pre-flush and post-flush

## SELF DIVERSION AGENTS

(TN-16.../TN-PD...)

### TN-16234

- cationic polymer
- viscosifies HCl acid by forming macromolecular structure
- applicable up to 120°C (248°F)
- can be used standalone as a viscosifier
- typical concentration range: 5-40 gpt (5-40 L/m<sup>3</sup>)

### TN-16236

- viscoelastic surfactant
- can be added directly to an acid or brine
- typical concentration range: 10-75 gpt (10-75 L/m<sup>3</sup>)
- applicable up to 130°C (266°F)
- can be used standalone in brine as a viscosifier

### TN-PD 10

- low pH solution of an organic buffer used in the cross-linked acid system to "lock" the pH at the proper range for complete cross-link
- normally used at 1-2 gpt (1-2 L/m<sup>3</sup>)

### TN-PD 20

- iron based crosslinker
- not compatible with iron control agents
- concentration range: 5-10.0 gpt (5-10 L/m<sup>3</sup>)

## POLYMER VISCOSIFIERS (TN-AG ...)

### TN-AG 60

- nonionic polymer
- dedicated up to 120°C (248°F)
- in low concentrations works as a friction reducer
- concentration range: 0,2-60 gpt (0,2-60 L/m<sup>3</sup>)

### TN-AG 40

- nonionic polymer
- dedicated for HT applications up to 160°C (320°F)
- in low concentrations works as a friction reducer
- concentration range: 0,2-60 gpt (0,2-60 L/m<sup>3</sup>)

## PARTICULATE DIVERTERS (TN-BLOCK...)

### TN-BLOCK 10

- benzoic acid flakes
- dissolves fast in crude oil and condensate
- concentration range in the first part of a treatment: 1-2,5 lb/gal (120-300 kg/m<sup>3</sup>)

### TN-BLOCK 60

- oil-soluble resin
- can be used up to 60°C (140°F)
- concentration range: 1-5 lb/gal (120-600 kg/m<sup>3</sup>)

### TN-BLOCK 120

- Oil-soluble resin
- can be used up to 120°C (248°F)
- concentration range: 1-5 lb/gal (120-600 kg/m<sup>3</sup>)

## FOAMING AGENT (TN-FOAM...)

### TN-FOAM 10

- based on nonionic and amphoteric compounds
- creates stable foam
- typical concentration range: 3-20 gpt (3-20 L/m<sup>3</sup>)

## H<sub>2</sub>S SCAVENGERS (TN-H<sub>2</sub>S...)

### TN-H<sub>2</sub>S

- aldehyde based H<sub>2</sub>S scavenger
- retains efficiency in acid based fluids
- typical concentration range: 1-5 gpt (1-5 L/m<sup>3</sup>)

## WATER SHUT-OFF CHEMICALS

(TN-WS/ TN-XL...)

### TN-WS 10

- high molecular mass PHPA
- creates stable gel with crosslinker for long period
- applicable up to 90°C (194°F)
- typical concentration range: 25-50 ppt (3-6 kg/m<sup>3</sup>)

### TN-XL CR1

- crosslinking agent for water shut-off
- applicable up to 90°C (194°F)
- typical concentration range: 10-20 gpt (10-20 L/m<sup>3</sup>)

## BARIUM SULFATE DISSOLVER (TN-13...)

### TN-13200

- higher rate of dissolution than standard chelating agents
- dissolves up to 4 gm of barium sulfate per 100 ml of solvent
- resistant to high temperature



## Contact

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