

FLOC BOOSTING ACTION WITHOUT THE RESIDUAL METALS

Nanonet Fe™ Concentrate (Fe™) is a water treatment additive that comprises a proprietary blend of surfactants and specialty polymers. It is an anionic coagulant designed to target specific contaminants in produced and wastewater streams, and can be dosed in combination with oxidizers, coagulants, or flocculants.

DELIVERY



Fe™ is delivered to site, ready to use, in 264-gallon (1,000 liter) IBC totes. It is classified hazardous, UN 1814 in accordance with 29 C.F.R. Section 1910.1200 for transportation purposes.

PERFORMANCE

Fe™ performs well when combined with oxidants and has proven effective in enhancing the efficiency of water treatment polymers thus reducing volumes required. It has proven effective in separating oil from oil-wet suspended solids and exhibits a stable floc in gravity and air assisted flotation equipment.

IMPORTANT PHYSICAL AND CHEMICAL PROPERTIES

(for a complete list see SDS)

Appearance – Water-based liquid

Color – Amber

Viscosity – 25 cps @ 25o C

pH – 12.0 To 14.0

Density – 0.95 to 1.10

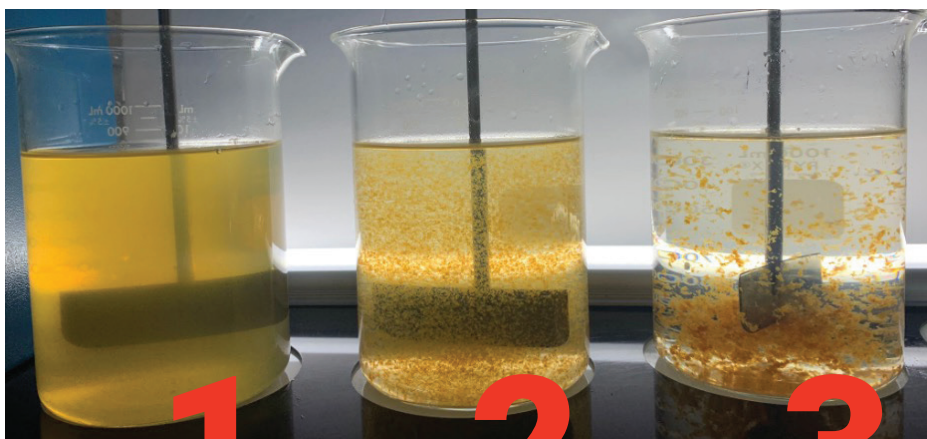
Odor – Mild/Sweet

Freeze Point – 32° F

Boiling Point – 212° F

Non-Flammable

Non-reactive and Stable



1

2

3



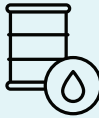


1 Raw Untreated Produced Water

2 + Flocculant

3 + Flocculant + NanoNet Fe™

APPLICATIONS

NanoNet Fe™ brings a level of efficacy to a range of applications where commodity chemicals fall short.

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|---|---|--|---|---|
|  <p>FLOCCULATION BOOSTING</p> <p>Improvements in flocculation efficiency through particle agglomeration</p> |  <p>COAGULANT DOSING IMPROVEMENTS</p> <p>Dosing in tandem with a coagulant brings that coagulant down and delivers robustness to dosing</p> |  <p>DECREASING SLUDGE GENERATION</p> <p>Seen either with full replacement of coagulant (ACH), or as part of the treatment process itself</p> |  <p>COAGULANT REPLACEMENT</p> <p>At full scale, typically in produced water</p> |  <p>ACIDIC CONDITION COAGULATION</p> <p>In scenarios where hydroxides are not coagulating properly and would prefer to avoid pH control</p> |
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TARGET WATER CHARACTERISTICS

NanoNet Fe works optimally as a coagulant replacement. The best results are seen treating waters that contain:

- ➔ Metal Hydroxides / Sulfates or Sulfides
- ➔ Hardness, specifically Calcium
- ➔ Cations (Fe, Al)
- ➔ Oil

TECHNICAL SPECIFICATIONS

| | NanoNet Fe™ |
|---------------------------------------|---------------|
| Specific gravity | 0.849-1.273 |
| Non-volatile solids (%) | 12.404-12.715 |
| Bulk viscosity (cP)* | 25 |
| pH | 13-14 |
| Conductivity (mS/cm) | 0.705-2.106 |
| Stability of DI water solution (days) | N/A |
| Storage temperature (C) | 4-60 |
| Shelf life (months)** | 12 |

*Average values (measured at 30 rpm) given for determination of preparation and dosing equipment for which a viscosity 10 times lower can be used.

**When product is stored inside a building at a stable temperature at 30°C

SAFETY PRECAUTIONS

Keep separate from acidic and oxidizing solutions

