



SAPP

Thinner and Dispersant

Description

SAPP (Sodium Acid Pyrophosphate) inorganic thinner, is a commercial chemical used as a thinner and dispersant in freshwater drilling fluids and as an aid in water well development.

Applications/Functions

The use of SAPP inorganic thinner assists and promotes the following applications and functions:

- Reduction of viscosity and gel strengths in freshwater drilling fluids
- Effective dispersion of reactive clays
- Dispersion of clay particles and sediments so they can be removed during well development
- Effective chemical treatment for cement contaminated fluids

Advantages

- Facilitates removal of calcium and reduces pH in cement contaminated fluids
- Fast acting and effective at low concentrations

Typical Properties

▪ Appearance	White crystalline powder
▪ Specific gravity	1.04
▪ pH	4.0 – 4.6
▪ Bulk Density, lb/ft ³	68

Recommended Treatment

To aid in water well development:

- Determine volume of water in screen area and double the calculated volume to account for water in gravel pack and formation interface.
- Completely dissolve 10-20 pounds of SAPP dispersant per 100 gallons water or 12-24 kilograms per cubic meter of water. Jet and surge this solution through the screen and gravel pack during well development. Repeat as necessary.
- Ensure that adequate development of the respective well is carried out after application of SAPP to achieve complete removal of the material from the producing formation.

Application Notes:

- Recognize that many states do not allow the use of phosphate-based dispersants for thinning of drilling fluids or for water well development. Consult all applicable federal, state and local regulations to ensure that the use of phosphate-based dispersants is acceptable for the respective application.
- Do not add dry SAPP dispersant directly into the well, screen or gravel pack.

For thinning of drilling fluid:

- Add 0.25 - 0.5 pound of SAPP inorganic thinner per 100 gallons (0.3 - 0.6 kg/m³) of drilling fluid
- For best results, completely dissolve SAPP inorganic thinner in a chemical barrel or in a small quantity of water before adding slowly to active system at the flowline.

**Recommended
Treatment
(continued)**

Treatment of cement contaminated drilling fluid:

- When treating cement contaminated drilling fluid, typical treatments using SAPP inorganic thinner are in the range of 0.5 - 1.0 lbs/bbl (1.2 – 2.4 lb/100 gallons or 1.4 - 2.9 kg/m³).
 - The above concentrations of SAPP dispersant are generally added for each 1.0 lb/bbl (2.4 lb/100 gallons or 2.85 kg/m³) of excess lime generated from cement.
- SAPP inorganic thinner may be added through the hopper or chemical barrel when treating cement contamination.

Packaging

SAPP inorganic thinner is packaged in 50-lb (22.7-kg) multiwall paper bags.

Availability

SAPP inorganic thinner can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products

Product Service Line, Halliburton

3000 N. Sam Houston Pkwy. E.
Houston, TX 77032

Customer Service (800) 735-6075 Toll Free (281) 871-4612

Technical Service (877) 379-7412 Toll Free (281) 871-4613
