

SAPP

Sodium Acid Pyrophosphate

CLEANER AND DISPERSANT

SAPP (Sodium Acid Pyrophosphate) ($\text{Na}_2\text{H}_2\text{P}_2\text{O}_7$) is widely used in industrial processes as a cleaner and dispersant.

SAPP is used as a strong deflocculant (thinner) in freshwater mud systems. The main application is dispersion of mud rings when water drilling and as a rapid thinner prior to cementing casing.

In water drilling applications, normally add one viscosity cup full of SAPP directly into the drill pipe at each connection. In areas with very reactive clays, increased treatments will be required. When using to thin the mud prior to cementing, mix as required to the circulating mud system.

In cementing applications, SAPP is used for two main purposes:

- Slurry properties such as fluid loss, thickening time and viscosity can be modified by contamination with drilling mud. SAPP is used in spacers to disperse and displace drilling mud to avoid cement contamination.
- Solids carrying fluid or drilling mud must be removed from the perforation channels and the rock face to allow a good cement bond and complete fill-up of the voids. The incorporation of SAPP into the spacer will help remove residual mud and provide a cleaner surface to which the cement can bond.

MIXING & HANDLING

It is advisable to use a dust mask and eye protection while mixing all powdered products. Avoid skin contact and do not inhale dust or allow contact with eyes. Do not ingest.

WHMIS: Not controlled

TDG: Not regulated

Packaging: 40lb sack

PHYSICAL PROPERTIES:

Appearance: Fine white powder

Specific Gravity: 1.862

Bulk Density: 800 kg/m³

Melting Point: 650°C

CHEMICAL PROPERTIES:

Type: Acid

Solubility: Soluble (13gm/100ml water @ 25°C)

pH: 4.0 (1% solution)

Microtox: 50% @ 0.25 kg/m³

