

# SMS

**Applications:** SMS (sodium metasilicate) is an efficient cement extender that is used to lighten, reduce free water, and prevent gas migration in cement slurries.

**Properties:**

- Effective from low to medium temperature applications.
- Incompatible with LTR retarder.
- Reduces effectiveness of most fluid loss chemicals.
- Moderately accelerates cement setting time.
- S.M.S. is a dry white crystalline powder.
- pH (1.0%) = 12.6.
- Specific Gravity = N/A.

**Advantages:**

- Helps to control gas migration.
- Can be used to decrease density and increase yield.
- Contributes thixotropic properties to cement.
- Effective in a large range of temperature applications.

**Disadvantages:**

- Not compatible with all blends.
- Increases cement viscosity.
- Decreases effectiveness of most additives.

**Handling Precautions:**

- Skin and eye irritant so goggles and protective clothing should be worn.

