

## Soda Ash KDF008

### 1. Introduction

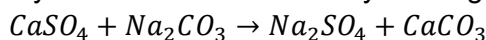
Soda Ash KDF008 is used primarily to remove calcium contamination particularly due to anhydrite.

### 2. Physical Properties and Hazards

| Additive | Form            | S.G.      | Water Solubility | Melting/Flash Point (°C) | Health Hazard          | Physical Hazard | pH        |
|----------|-----------------|-----------|------------------|--------------------------|------------------------|-----------------|-----------|
| KDF008   | White Particles | 2.51-2.53 | Soluble          | -                        | Eyes, Skin, Inhalation | Dust            | 11.5 (5%) |

### 3. Chemical Properties and Application

Soda ash effectively and economically removes calcium ions by forming the insoluble carbonate:



It is not recommended for treatment of cement contamination due to the increase in pH which occurs.

It is particularly used for anhydrite contamination.

Chemical Nature:  $Na_2CO_3$  at Molecular Weight: 106  
Solubility: Soluble in water up to 33% w/w at 32°C (90°F).

### 4. Treatment

The theoretical soda ash treatment required:

$Fw \times 0.00264 \times \text{mg/liter calcium (kg/m}^3\text{)}$  or  $Fw \times 0.000925 \times \text{mg/liter calcium (lbm/bb)}$ , where,  
Fw is the water fraction in the mud.

In practice, larger treatments may be needed due to interaction with other components. Over-treatment should be avoided as the carbonate ion in solution will cause gel strengths to rise. Addition of soda ash can also cause pH rise.

### 5. Packaging

KDF008 is supplied in 25 KG or 50 KG 4-ply paper sacks.

Keep it away from extreme conditions such as places wet and humid or direct sunlight.