AQUABOND
Chemistry for Tomorrow

Summary Technical Data Sheet

Sodium Metasilicate Anhydrous

Product Name: Sodium Metasilicate Anhydrous

CAS Number: 6834-92-0

Formula: Na_2SiO_3

Synonyms: Sodium silicate, Disodium trioxosilicate.

Appearance: White granular powder

Density: 2.61 g/cm³

Molecular Weight: 122.06 g/mol

Melting Point: 1,088 ° C (1,990° F)

Typical Product Specifications

Content (as Na_2O)	50.50 ± 1.00 %
Content (as SiO_2)	46.0 ± 1.0 %
Fe	≤ 200 ppm
Density	1.05 ~ 1.35
Particle Size (18~60 mesh)	≥ 93.0 %
Whiteness	≥ 85 %

Sodium Metasilicate Anhydrous is a white, free-flowing, granular powder, which is used in many cleaners, detergents, and soap formulations. It is an effective coagulant in water treatment, dye fixative, binder, cement binding agent, corrosion inhibitor, and penetrating sealant.

In cleaning formulations, Sodium Metasilicate Anhydrous significantly improves detergent action and acts as an efficient emulsifying and suspension agent. It is widely used as a builder in cleaners, soaps and detergents since it effectively improves and maintains the cleaning efficiency of surfactants by inactivating water hardness.

Sodium Metasilicate Anhydrous has many applications in construction, particularly in cement and sealants. In cements and concrete, Sodium Metasilicate Anhydrous is an effective binding agent with the benefits of easy dissolution in water, low dust, and high reactivity. It is an important component of wet and dry mixes in shotcrete, which yields excellent strength of the resulting structure. It is also used in oil well cements to prevent separation of solids from the cement matrix. Sodium Metasilicate can be used as an extender and enable a higher ratio of water to cement.

In pulp and paper, Sodium Metasilicate Anhydrous is used as a sizing agent and buffer/stabilizing agent in combination with hydrogen peroxide.

Automotive applications of Sodium Metasilicate Anhydrous include the decommissioning of old engines, exhaust repair, and cooling system sealant.

Sodium Metasilicate is an important starting material for silica catalysts and zeolites. It is also used in boiler water, paint strippers, drilling fluids, fire retardants.

Storage and Handling: Keep containers tightly closed in a cool, dark, ventilated place.

Packaging: 55 lb / 25 kg bag

Transport Regulations: UN 3253. Hazard Class 8. Packing Group 3. Disodium trioxosilicate.

The above information, while not guaranteed, reflects our analysis and believed to be accurate. It is the end user's responsibility, prior to use of the above mentioned product to determine the suitability of the product. Aqua Bond shall not be, directly or indirectly responsible for damages of any nature whatsoever resulting from the use or reliance upon the above information.
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