



Chemicals for Construction from Chemical Division.

Calcium Lignosulfonate

Magnesium Lignosulfonate

Sodium Lignosulfonate

Sodium Naphthalenesulfonate condensated.(NAMAMOL)

Polycarboxylic acid Sodium salt

Sodium aluminate

Fumed Silica

Calcium chloride

Fly ash



Industrial Chemicals from Chemical Division

Chemicals for Paint and Resin Industry

1. Toluene Diisocyanate (TDI)
2. Polyol
3. Chrome oxide Green
4. Iron Oxide Red/Yellow/Green/Black/Brown
5. Lithopone
6. Maleic Anhydride
7. Melamine
8. Pentaerythritol
9. Petroleum Resin C5/9
10. Phthalic Anhydride
11. Titanium Dioxide Rutile
12. Zinc Oxide

Chemicals for Detergent and Soap Industry

1. Caustic Soda 96/98/99 flakes/pearls/solid
2. (Sodium) carboxyl methyl cellulose CMS
3. Sodium tripolyphosphate
4. Sodium Tripolyphosphate
5. Sodium Hexametaphosphate SHMP
6. Sodium Lauryl Ether Sulfate(SLES)
7. Sodium Silicate
8. Linear Alkyl Benzene Sulphonic Acid
11. Sodium Hydrosulphite(SHS)
12. Sodium Hyposulphite
13. Sodium Metabisulphite
14. Sulphur BlackBR/2BR 200%/220%
15. Ammonium Chloride Tech Grade
16. Sodium Sulphite Anhydrous

Chemicals for Agriculture, Food and Feed Industry

1. Benzoic Acid 99.5%(Food Grade)
2. Choline Chloride 50%/60%
3. Copper Sulphate 98% Pentahydrate
4. Fumaric Acid 99.5%(Food Grade)
5. Glyphosate 95%
6. Manganese Sulphate 98%(Feed Grade)
7. Phosphoric Acid 85%(Food Grade)
8. Sodium Saccharin (Food Grade)
9. Sodium Benzoate 99%
10. Zinc Oxide 74%/72%/68%
11. Zinc Sulphate 98%(Feed Grade)

Chemicals for Plastic, Rubber and Ceramic Industry

1. Borax Anhydrous/Pentahydrate
2. Boric Acid
3. Carbon Black
4. Calcium Carbonate CCR
5. Dioctyl Phthalate (DOP)
6. Dibutyl Phthalate (DBP)
7. Diisononyl Phthalate (DINP)
8. Epoxidized Soybean Oil
9. Furfural
10. Furfuryl Alcohol
11. Melamine Formaldehyde resin
12. Polyvinyl Chloride Resin (PVC)
13. Stearic acid
14. Urea formaldehyde resin
15. Tribasic Lead Sulphate
16. Zinc Oxide

Chemicals for Water Treatment Industry

1. Acetic Acid Glacial
 2. Basic Chrome Sulphate
 3. Formic Acid
 4. Hydrogen Peroxide
 5. Indigo Blue
 6. Oxalic Acid
 7. Trisodium Phosphate
 8. Sodium Formate
 9. Soda Ash
 10. Sodium Hexametaphosphate (SHMP)
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Construction chemical from Chemical Division

Products in NAMAMOL consist of the Salt of Napthalene Sulphonic Acid Condensed with Formaldehyde to a very high molecular weight.

TYPEICAL ANALYSIS

| | Powders |
|-------------------|---------|
| Base | Sodium |
| Total Solids % | 94 |
| Sodium Sulphate % | 23 |
| PH(2%Solution) | Nil |
| Chloride | Nil |

PHYSICAL APPEARANCE

NAMAMOL is spray dried powders readily soluble in water at 60C with vigorous stirring.

NAMAMOL is low viscosity clear light brown liquids being (40% w/w solid) solution.

MECHANISM

The products have an excellent dispersing effect of solids in aqueous Media by modifying the charges upon the solid particles such that their normal agglomeratin is prevented and the particles become mutually repellent within the slurty.

The action is upon the solid particles rather than the liquid. Its surface tension is not altered and there is no tendency to foam.

Below are a list of industries in which the range of products are commonly used.

| Industry | Use and Advantage |
|-----------------------|--|
| Building | NAMAMOL is particularly suitable |
| Pigment | for application as a super plasticiser for cements and concrete. It may be used alone or in established formulations. One of its interesting properties is its minimal retardation effect. used in the manufacture of aqueous |
| Dispersion | pigments dispersion as a grinding, Stabilizing and dispersing agent, Suggested concentration 0.1-0.5% Solids based on the pigment weight. Used as an additive to dispersible Pigment to aid rewetting and dispersion Suggested concentration 0.1-0.5% solids Based on the pigment weight. |
| Agricultural | Used as a dispersing agent in the formulation Based on total weight of product |
| Chemicals | Suggested concentration 0.1-0.5% solids Based on total weight of product |
| Paper Industry | Used in control of pitch in early stages of paper making. Suggested concentration about 0.2% Solids based on dry pulp. |
| Textile Dyeing | Used with anionic dyestuffs of all types as a leveling and dispersing agent. Has a restraining effect on the dyestuff. Used as the dispersing agent for dispersed dyes. The low foaming characteristics of NAMAMOL makes it ideal for Use in conjunction with high modern Dyeing machinery and techniques. |

