



Certificate No. : 6709QMS002

Shree Jay Ambe

Associated Finechem Pvt. Ltd.



Factory :

Plot No. 184 to 186, Nr. Claris, Village Chacharawadi, Vasna,
Sarkhej Bawla Highway, Ta. Sanand, Dist. Ahmedabad-382 213.

Phone : 02717 - 251 524, 320 055, (M) 099740 13525

Fax : 02717 - 251 525 Website : www.jaydinesh.com

Regd Office :

303/304, Murlidhar Complex, Opp. Fatehpura Post Office,
Bhattha, Paldi, Ahmedabad - 380 007.

Phone : 079 - 2660 8664, 2660 8667, 6542 2470, 3252 2424

Fax : 91- 079 - 2660 4088 Email : info@jaydinesh.com

MATERIAL SAFETY DATA SHEET

Trade Name: **Sodium Metasilicate, Pentahydrate**

1: Chemical Product and Company Identification

Product name: SODIUM META SILICATE PENTAHYDRATE
Producer Name: ASSOCIATED FINECHEM PVT. LTD
Plant Location: Sarkhej Bavla Highway, Ahmedabad, Gujarat, India,

2. CHEMICAL PRODUCT

Product name: Sodium Metasilicate, pentahydrate
Product description: Granular sodium metasilicate
Product Use: Cleaning compounds & detergents

3. HAZARDS IDENTIFICATION

Emergency Overview: White, Odourless, Granular Powder. Corrosive to eyes, Skin, and Digestive Tract.
Dust corrosive to respiratory tract. High pH is harmful to aquatic life. Non-combustible. Reacts with acids and some organics.

Eye contact: Corrosive. Causes eye burns.
Skin contact: Corrosive. Causes skin burns.
Inhalation: Dust corrosive to respiratory tract.
Ingestion: Corrosive. Causes burns to mouth, esophagus, and stomach.

4. FIRST AID MEASURES

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention.
Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammable limits: This material is non-combustible.
Extinguishing Media: This material is compatible with all extinguishing media



Certificate No. : 6709QMS002

Shree Jay Ambe

Associated Finechem Pvt. Ltd.



Factory :
Plot No. 184 to 186, Nr. Claris, Village Chacharawadi, Vasna,
Sarkhej Bawla Highway, Ta. Sanand, Dist. Ahmedabad-382 213.
Phone : 02717 - 251 524, 320 055, (M) 099740 13525
Fax : 02717 - 251 525 Website : www.jaydinesh.com

Regd Office :
303/304, Murlidhar Complex, Opp. Fatehpura Post Office,
Bhattha, Paldi, Ahmedabad - 380 007.
Phone : 079 - 2660 8664, 2660 8667, 6542 2470, 3252 2424
Fax : 91- 079 - 2660 4088 Email : info@jaydinesh.com

Fire-fighting equipment: The following protective equipment for fire fighters is recommended
When this material is present in the area of a fire: chemical goggles,
body-covering protective clothing, chemical resistant gloves, and rubber boots.

Hazardous Combustion

Products: Not available

Explosion data

Sensitivity to mechanical impact and static discharge: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal protection: Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots, NIOSH-approved dust respirator where dust occurs.

Environmental Hazards: Sinks and mixes with water. High pH of this material is harmful to aquatic life,

Small spill cleanup: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE).

Large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE). In case of contact with water, prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Neutralize contaminated area and flush with large quantities of water. Comply with applicable environmental regulations.

7. HANDLING AND STORAGE

Handling: Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep container closed. Promptly clean up spills. Wash thoroughly after handling.

Storage: Store at temperatures below 65°C (150°F). Keep containers closed. Store in clean, tightly closed steel, fibre, or plastic containers. Separate from acids, reactive metals, and ammonium salts. Do not store in aluminium, fibreglass, copper, brass, zinc or galvanized containers. This product can absorb water from the air. In case of high humidity or storage for extended periods of time, use plastic bags to enclose product containers to avoid caking. Packaged inventory should be used on a first in, first out (FIFO) basis. Bulk storage bins should be painted white or aluminium to minimize sun-heat

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use only with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

Respiratory protection: Use a NIOSH-approved dust respirator where dust occurs. Observe Provincial regulations for respirator use.

Skin protection: Wear body-covering protective clothing and gloves.

Eye protection: Wear chemical goggles.



Certificate No. : 6709QMS002

Shree Jay Ambe

Associated Finechem Pvt. Ltd.



Factory :

Plot No. 184 to 186, Nr. Claris, Village Chacharawadi, Vasna,
Sarkhej Bawla Highway, Ta. Sanand, Dist. Ahmedabad-382 213.

Phone : 02717 - 251 524, 320 055, (M) 099740 13525

Fax : 02717 - 251 525 Website : www.jaydinesh.com

Regd Office :

303/304, Murlidhar Complex, Opp. Fatehpura Post Office,
Bhattha, Paldi, Ahmedabad - 380 007.

Phone : 079 - 2660 8664, 2660 8667, 6542 2470, 3252 2424

Fax : 91- 079 - 2660 4088 Email : info@jaydinesh.com

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|---|
| Appearance: | Granular powder. |
| Color: | White. |
| Odour: | Odourless or musty odour. |
| pH: | Approximately 14 |
| Bulk density: | Approximately 49 lbs/ft ³ untamped, 59 lbs/ft ³ tamped. |
| Solubility in water: | Soluble. |
| Flash point: | Not applicable |
| Auto-ignition temp. | Not applicable |
| Vapor pressure: | Not applicable |
| Vapor density: | Not applicable |
| Evaporation rate: | Not applicable |
| Boiling point: | Not applicable |
| Freezing point: | Not applicable |
| Coefficient of water /oil distribution: | Not applicable |

10. STABILITY AND REACTIVITY

| | |
|--------------------------------------|--|
| Stability: | This material is stable under all conditions of use and storage. |
| Conditions to avoid: | None. |
| Materials to avoid: | Generates heat when mixed with acid. May react with ammonium salt solutions resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminium, tin, lead, and zinc. Carbon monoxide gas may be produced on contact with reducing sugars. |
| Hazardous decomposition products: | Hydrogen. |

11. TOXICOLOGICAL INFORMATION

| | |
|------------------|--|
| Acute Data: | This material has not been tested for primary eye irritation potential. However, on the basis of its high degree of alkalinity, it is regarded as corrosive to the eyes. When this material was tested for skin corrosion/irritation potential according to OECD Guidelines Section 404, it produced dermal corrosion. The acute oral toxicity of this product has not been tested. When sodium silicates were tested on a 100% solids basis, their single dose acute oral LD ₅₀ in rats ranged from 1500 mg/kg to 3200 mg/kg. The acute oral lethality resulted from nonspecific causes. |
| Subchronic Data: | In a study of rats fed sodium silicate in drinking water for three months, at 200, 600 and 1800 ppm, changes were reported in the blood chemistry of some animals, but no specific changes to the organs of the animals due to sodium silicate administration were observed in any of the dosage groups. Another study reported adverse effects to the kidneys of dogs fed sodium silicate in their diet at |



Certificate No. : 6709QMS002

Shree Jay Ambe

Associated Finechem Pvt. Ltd.



Factory :

Plot No. 184 to 186, Nr. Claris, Village Chacharawadi, Vasna,
Sarkhej Bawla Highway, Ta. Sanand, Dist. Ahmedabad-382 213.

Phone : 02717 - 251 524, 320 055, (M) 099740 13525

Fax : 02717 - 251 525 Website : www.jaydinesh.com

Regd Office :

303/304, Murlidhar Complex, Opp. Fatehpura Post Office,
Bhattha, Paldi, Ahmedabad - 380 007.

Phone : 079 - 2660 8664, 2660 8667, 6542 2470, 3252 2424

Fax : 91- 079 - 2660 4088 Email : info@jaydinesh.com

Special Studies:

2.4g/kg/day for 4 weeks, whereas rats fed the same dosage did not develop any treatment-related effects. Decreased numbers of births and survival to weaning was reported for rats fed sodium silicate in their drinking water at 600 and 1200 ppm.

Sodium silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of sodium silicates. Frequent ingestion over extended periods of time of gram quantities of silicates is associated with the formation kidney stones and other siliceous urinary calculi in humans. Sodium silicate is not listed by IARC, NTP or OSHA as a carcinogen.

12. ECOLOGICAL INFORMATION

Eco toxicity:

The following data is reported for sodium silicates on a 100% solids basis: A 96 hour median tolerance for fish (*Gambusia affinis*) of 2320 ppm; a 96 hour median tolerance for water fleas (*Daphnia magna*) of 247 ppm; a 96 hour median tolerance for snail eggs (*Lymnea*) of 632 ppm; and a 96 hour median tolerance for Amphipoda of 160 ppm.

Environmental Fate:

This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material yields dissolved silica in a form that is indistinguishable from natural dissolved silica. This material does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. However, the addition of excess dissolved silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded. Neither silica nor sodium will appreciably bioconcentrate up the food chain.

Physical/Chemical:

Sinks and dissolves in water.

13. DISPOSAL CONSIDERATIONS

Classification:

Waste material is classified as a minor hazardous waste.

Disposal Method:

Dispose in accordance with central, state and local regulations.

14. TRANSPORT INFORMATION

TDG UN Status:

This material is a regulated minor hazardous material.

UN HAZARD CLASS/DIVISION

8

UN IDENTIFICATION NUMBER:

UN3253

UN PACKING GROUP:

PG III

15. Regulatory information

THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE GOVERNMENT CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS



Certificate No. : 6709QMS002

Shree Jay Ambe

Associated Finechem Pvt. Ltd.



Factory :

Plot No. 184 to 186, Nr. Claris, Village Chacharawadi, Vasna,
Sarkhej Bawla Highway, Ta. Sanand, Dist. Ahmedabad-382 213.

Phone : 02717 - 251 524, 320 055, (M) 099740 13525

Fax : 02717 - 251 525 Website : www.jaydinesh.com

Regd Office :

303/304, Murlidhar Complex, Opp. Fatehpura Post Office,
Bhattha, Paldi, Ahmedabad - 380 007.

Phone : 079 - 2660 8664, 2660 8667, 6542 2470, 3252 2424

Fax : 91- 079 - 2660 4088 Email : info@jaydinesh.com

16. OTHER INFORMATION

THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH THE USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT. THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, SINCE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY THE USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS.