

Material Safety Data Sheet
Product Name: Sodium Metasilicate, Anhydrous
Item# DP50/POSDEV

Chemical Name:	Sodium Silicate
Synonyms:	Silicate acid, disodium salt
CAS Number:	68340952-0
Molecular Formula:	Na ₂ SiO ₃
CDS No:	10303
Issue Date:	8/87
Issue Number:	2(r)

Use: In formulation of detergents & cleaners

GENERAL HAZARD STATEMENT:

Harmful alkaline solid. Irritant to skin, eyes and mucous membrane. Avoid inhaling dust. Not combustible. Use good occupational work practice.

PHYSICAL PROPERTIES:

White granules or powder. Soluble in water; precipitated by acids and by alkaline earth and heavy metal ions. Insoluble in alcohol.

Melting point: 1089 deg. C

Specific Gravity: 2.4

Density: 2.614

pH(1% aqueous solution)=12.8

HEALTH CONSIDERATIONS:

Considered to be harmful by all exposure routes. Contact with skin will result in irritation, especially in perspiring areas and may cause skin burns. Repeated or prolonged skin contact may lead to dermatetic effects. A server eye irritant. Inhalation of dust will result in respiratory irritation. In severe cases, congestion of the lungs can occur causing shortness of breath followed by unconsciousness. Pulmonary edema may result. Ingestion can result in nausea, vomiting and stomach pain.

THRESHOLD LIMIT VALUE (TLV)

None assigned by National Health & Medical Research Council

PERSONAL PROTECTION RECOMMENDATIONS:

Avoid skin and eye contact. Wear impervious gloves, safety glasses and overalls. Use with adequate ventilation. Avoid inhalation of dusts. If dusts exists, wear approved dust mask. Always wash hands before smoking, eating, drinking or using the toilet

FIRST AID:

SKIN: Immediately wash contaminated skin with plenty of water. Remove clothing if contaminated and wash before reuse. If swelling, redness, blistering or irritation occurs seek medical advise.

EYES: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash contaminated skin. Seek immediate medical advice.

INHALATION: Remove victim from exposure-avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible, either on site or at the nearest hospital.

INGESTION: Give water to drink. **DO NOT** induce vomiting. **SEEK** immediate medical assistance. Poison Information Centers in each state capital city can provide additional assistance for scheduled poisons.

ADVICE TO DOCTOR:

Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

HANDLING:

Harmful solid. Avoid contact with moisture. Avoid generating dust. use good occupational work practices.

REACTION:

Strongly alkaline in solution. Reacts with acid. Absorbs moisture from air.

STORAGE & TRANSPORT:

The product is a Scheduled Poison (s5) and must therefore be stored, maintained and used in accordance with the relevant State Poison Act. At all times to be stored away from foodstuffs

FIRE/EXPLOSION HAZARDS:

Not considered to be a significant fire risk.

Extinguishing media: Water spray, foam, carbon dioxide, dry chemical powder, BCF.

SPILLS:

Increase ventilation. Cover with damp absorbent. Sweep up, but avoid generating dust. Collect and seal in drums for disposal. Wash area down with large quantity of water.

DISPOSAL:

Refer to state land waste management authority. Normally suitable for disposal at approved land waste site.

TOXICITY:

Oral LD/50 (rat): 1280 mg/kg

Estimated fatal dose (Human): 50g

EYES:

Severe irritant

SKIN:

Severe irritant