PRODUCT NAME: Sodium Silicofluoride

FORMULA: Na₂SiF₆

CHEM. FAMILY: Inorganic compounds

CHEMICAL NAME AND SYNONYMS:
- Sodium Silicofluoride
- Sodium Fluorosilicate
- Disodium Hexafluorosilicate
- SSF
- LP Sour
- Laundry Fluoride Sour

SUPPLIERS NAME: Harcros Chemicals Inc.
5200 Speaker Road
Kansas City, KS 66106-1095

TRANSPORTATION EMERGENCY PHONE NUMBER: 1-800-424-9300

HAZARDS: Acute

PHYSICAL DATA: Pure Solid

SECTION I HAZARDOUS INGREDIENTS

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<table>
<thead>
<tr>
<th>Max. %</th>
<th>APPLIES</th>
<th>TWA/TLV</th>
<th>STEL</th>
<th>C 비</th>
<th>SKIN</th>
<th>AGENT</th>
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<td>W/W</td>
<td>312</td>
<td>313</td>
<td>372</td>
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Sodium Silicofluoride
Sodium Fluoro silicate
(CAS # 16893-85-9)

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SECTION II HEALTH HAZARDS

POTENTIAL EFFECTS OF EXPOSURE

EYES
Eye contact with product may cause irritation

SKIN
Skin contact may cause irritation. Central nervous system (CNS) depression. Absorption thru skin may cause symptoms described under inhalation and ingestion. May be absorbed in harmful amounts.

INHALATION

Continued On Page 2
Inhalation may cause irritation bleeding weakness breathing difficulty lowered calcium level in the blood (hypocalcemia) central nervous system (CNS) depression. Symptoms of early to moderate central nervous system (CNS) depression include giddiness, dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting, tiredness and drowsiness. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma, and even death. Prolonged or repeated overexposure by inhalation may cause nausea vomiting loss of appetite.

Ingestion may cause nausea vomiting bleeding diarrhea weakness visual disturbance convulsions central nervous system (CNS) depression Symptoms of early to moderate central nervous system (CNS) depression include giddiness, dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting, tiredness and drowsiness. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma, and even death.

TARGET ORGANS
OVEREXPOSURE MAY CAUSE DAMAGE TO, DISORDERS OF, OR ADVERSELY AFFECT THE FOLLOWING SYSTEMS, FUNCTIONS, ORGANS: body systems central nervous system kidneys lungs gastrointestinal tract bones

FIRST AID
FIRST AID EYES
Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

FIRST AID SKIN
Immediately wash skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Call a physician.

FIRST AID INHALATION
Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

FIRST AID INGESTION
Do not induce vomiting. Rinse mouth with water. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. Call a physician immediately.

OTHER INFORMATION
ROUTES OF ENTRY
eye contact skin contact inhalation ingestion
OVEREXPOSURE MAY AGGRAVATE DISORDERS OF THE respiratory system skin

SECTION III SPECIAL PROTECTION

PROTECTIVE EQUIPMENT

PROTECTIVE EQUIPMENT EYES
chemical goggles Always wear eye protection when working with chemicals. Do Not wear contact lenses when working with chemicals.

Continued On Page 3
PROTECTIVE EQUIPMENT

SKIN
- Clean protective clothing rubber boots rubber apron impervious gloves

INHALATION
- If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

VENTILATION REQUIRED:
- Adequate ventilation is required to minimize exposure or to maintain exposure levels below OSHA/ACGIH requirements. Local mechanical ventilation may be required.

ADDITIONAL PROTECTIVE MEASURES
- Safety shower, eye wash fountain, and washing facilities should be readily available.

SECTION IV FIRE & EXPLOSION HAZARD DATA

Flash Point (METHOD): > OR = N/A
Flammable Limits (% Volume in Air)  UPPER  N/D  Lower:  N/D

HMIS Info  
- Health: 2
- Fire: 0
- React: 0
- Special: X

media appropriate for surrounding fire

FIRE FIGHTING PROCEDURES
- Prevent human exposure to fire, fumes, smoke, and products of combustion. Evacuate non-essential personnel. Firefighters should wear full face, self contained breathing apparatus and impervious protective clothing. Use water to cool containers exposed to fire.

UNUSUAL FIRE & EXPLOSION HAZARDS
- Toxic fumes may be released.

SECTION V PHYSICAL DATA

- Boiling Point: N/D
- Freezing Point: N/D
- Specific Gravity \( (H_2O=1) \): \( \times \ OR = \ 2.7000 \ @ \ 68 \ deg. \ F \)
- Vapor Pressure \( \text{MM HG} \): N/D
- Vapor Density \( \text{AIR=1} \): N/D
- Evaporation Rate \( \text{NA} \): 1
- Solubility in Water: <1%
- Percent Volatile by Volume: N/D
- pH: aqueous approx. \( \times \ OR = 3.500 \)

Continued On Page 4
Appearance:
SOLID - POWDER, CRYSTAL, FLAKE, GRANULE
TABLET, PRILL, BRICUETTE, ETC.
Odor: NIL

SECTION VI REACTIVITY DATA

STABILITY
Stable

INCOMPATIBILITY
inorganic acids

HAZARDOUS DECOMPOSITION PRODUCTS
hydrogen fluoride fumes of metal oxides carbon monoxide carbon dioxide

HAZARDOUS POLYMERIZATION
Will not occur

SECTION VII SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Evacuate non essential personnel, eliminate ignition sources, and wear protective equipment (See Section III). Shut off source of leak only if safe to do so. Contain spill. Recover free product. To clean up residue, flush sparingly with water or use an absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non sparking tools. If acidity (low pH) is a problem, neutralize with hydrated lime, soda ash, or sodium bicarbonate. If alkalinity (high pH) is a problem neutralize with dilute acetic acid or dilute hydrochloric (muriatic) acid. If required, notify state and local authorities.

DISPOSAL METHOD
Solids must be disposed of in a permitted hazardous waste management facility. Recovered liquids may be reprocessed or incinerated. Incineration must be handled in a permitted hazardous waste management facility. Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State.

SECTION VIII

Proper Shipping Name: SODIUM FLUOROSILICATE
Hazard Class: 6.1, UN2674, PGIII
Label Requirements: KEEP AWAY FROM FOODSTUFFS
Reportable Quantity: None

SECTION IX ADDITIONAL INFORMATION

Continued On Page 5
Appearance:
- SOLID - POWDER, CRYSTAL, FLAKE, GRANULE
- TABLET, PRILL, BRIQUETTE, ETC.
Odor:
- NIL

SECTION VI REACTIVITY DATA

STABILITY
Stable

INCOMPATABILITY
- inorganic acids

HAZARDOUS DECOMPOSITION PRODUCTS
- hydrogen fluoride
- fumes of metal oxides
- carbon monoxide
- carbon dioxide

HAZARDOUS POLYMERIZATION
Will not occur

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Hazard Class:
- 6.1, UN2674, PGIII

Label Requirements:
- KEEP AWAY FROM FOODSTUFFS

Reportable Quantity:
- None

SECTION IX ADDITIONAL INFORMATION

Continued On Page 5