SAFETY DATA SHEET

Texas Correctional Industries
Texas Department of Criminal Justice

Date Issued: December 2020
Supersedes: September 2016

SECTION 1 - IDENTIFICATION

Product Name: De-Jest
General Use: Powder Laundry Detergent
Manufacturer Name: Texas Correctional Industries
Roach Soap & Detergent Plant
15845 Fm 164
Childress, TX 79201

Emergency Telephone Numbers
Texas Poison Center Network (TPCN): 1-800-222-1222
Roach Soap & Detergent Plant Lab: 940-937-6364 EXT. 7392
SDS available at: www.tci.tdcj.texas.gov
Monday thru Thursday: 5:30 AM – 3:30 PM

SECTION 2 - HAZARD IDENTIFICATION

Primary Route of Exposure: Eyes, Skin, Oral, or Inhalation

Signs and Symptoms of Over Exposure (acute):
- Eyes: CAUTION: Corrosive powder; May cause eye irritation
- Skin: May cause redness or rash
- Ingestion: May cause gastrointestinal irritation
- Inhalation: May be an irritant to the respiratory tract

Signs and Symptoms of Over Exposure (chronic): Eye, skin, and respiratory tract irritation

Medical condition aggravated by over exposure: Not known

Carcinogen or suspect of carcinogen ingredients: Silicone Dioxide listed on NTP

GHS Hazard and/or Precautionary Numbers: H333, H370, H227, H312, H400, H414

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical/Common Name</th>
<th>CAS No.</th>
<th>PERCENT</th>
<th>TWA</th>
<th>PEL</th>
<th>WHMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Metasilicate</td>
<td>6834-92-0</td>
<td>&gt;71</td>
<td>3 mg/m³</td>
<td>3 mg/m³</td>
<td>1%</td>
</tr>
<tr>
<td>Sodium Dodecyl benzene sulfonate</td>
<td>25155-33-0</td>
<td>~13</td>
<td>N/E</td>
<td>N/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate</td>
<td>7758-29-4</td>
<td>~13</td>
<td>5 mg/m³</td>
<td>N/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Sodium sulfate, disodium sulfate</td>
<td>7757-82-6</td>
<td>&lt;1.0</td>
<td>10 mg/m³</td>
<td>5 mg/m³</td>
<td>N/D</td>
</tr>
</tbody>
</table>

N/A= Not Applicable  N/D = Not Determined

Threshold Limit Values (TLV): TWA (time-weighted average for 8 hr. day); PEL (personal exposure limit)
WHMIS – minimum amount necessary in a mixture to trigger reporting: 1% [hazardous chemical]; 0.1% [extremely hazardous chemical]

SECTION 4 - FIRST AID MEASURES

Eyes: Flush with plenty of water for at least 15 – 20 minutes. Seek medical attention immediately.
Skin: Flush with large amount of water. Wash skin area with soap and water if any residual persists. Remove contaminated clothing and seek medical attention if irritation persists.
Ingestion: Rinse mouth thoroughly. Drink plenty of water. Do not induce vomiting unless directed by physician.
Inhalation: Move person to fresh air. Give artificial resuscitation (CPR) if person is not breathing.
SECTION 5 - FIRE FIGHTING MEASURES

- Flammable Limit : N/A
- Physical Hazard : Corrosive
- Extinguishing Media : Water, Foam, Dry Chemicals, or Carbon Dioxide
- Fire Extinguishing Procedure : Use of respiratory equipment is recommended in enclosed areas; avoid breathing dust
- Fire and Explosive Hazard : None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if released or spilled : Sweep all materials practical for salvage or disposal. Rinse residue with water.

SECTION 7 - HANDLING AND STORAGE

- Store in a cool, dry (avoid moisture), ventilated area
- Avoid breathing dust
- Do not get in eyes, on skin, or clothing
- Wash thoroughly after handling
- Do not store in aluminum containers; flammable hydrogen gas may be generated.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory Protection : None required with normal use
- Ventilation Requirement : Local exhaust; Maintain adequate ventilation
- Protective Gloves : Yes; rubber or neoprene
- Eye Protection : Chemical goggles

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Specific Gravity (g/ml) : N/A
- Solubility in Water : Complete
- pH (1% aqueous solution) : ≈12.8
- Boiling Point : N/A
- Appearance and Odor : White to off white granular powder

SECTION 10 - STABILITY AND REACTIVITY

- Hazardous Decomposition : Oxides of carbon and sulfur
- Stability : Stable
- Incompatibility : With strong acids and oxidizing agents – bleaching agents

NOTE: The C### notation (below) refers to a principal component based on the amounts present in the product which may involve trade secret chemicals.
In the event of an accident, notify the Poison Control Center for more information.
SECTION 11 – TOXICOLOGICAL INFORMATION

C056

IRRITATION DATA:
250 mg/24 hour(s) skin-human: severe;
250 mg/24 hour(s) skin-rabbit: severe;
250 mg/24 hour(s) skin-guinea: pig moderate

TOXICITY DATA:
Sodium Metasilicate Component LD50 Oral: 600 mg/kg (Rat)

ACUTE TOXICITY:
Sodium metasilicate can produce caustic burns (i.e., colliquative necrosis) and induce hypocalcemia by binding calcium. Oral administration of sodium metasilicate to rats and mice (1153 and 770 mg/kg, respectively) produced ulceration or bleeding in the stomach, duodenum, and small intestine. Oral doses of a 20% solution (464, 1000, 2150, and 4640 mg/kg produced gasping, dyspnea, acute depression, and/or nasal discharge at 1000 mg/kg; and the highest dose caused death. Injection of a neutralized 2.0% sodium metasilicate solution (1200 mg/kg on day 1 and 800 mg/kg on days 2 and 3) decreased rat spleen weight by 60% and increased kidney weight. Microscopic lesions of the lymphatic tissues and cellular damage in the intestinal mucosa were also observed.

CHRONIC TOXICITY:
No data were available regarding chronic exposure, reproductive or teratological effects, or carcinogenicity for sodium metasilicate.

CARCINOGENICITY:
This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA:
In assays using Bacillus subtilis strains without metabolic activation, sodium metasilicate (0.005 to 0.5M) was not genotoxic.

C061

LD50 (oral, rat): 6500 mg/kg (8)
LD50 (oral, rat): 3900 mg/kg (9, unconfirmed)
LD50 (oral, mouse): 3210 mg/kg (9,10 unconfirmed)

Skin Irritation (rabbit, guinea pig): Negligible irritation and no visible tissue damage was observed after a 50% solution was applied to intact and abraded skin.(l)

Effects Of Long-Term Ingestion:
Kidney damage was observed in rats fed a diet containing 2% or 10% sodium tripolyphosphate for one month, but not in animals fed 0.2%.(10) Kidney damage was also observed in rats fed 3% sodium tripolyphosphate for 6 months and 5% for 2 years. No detectable toxic effects were observed following ingestion of 1.8% in the diet for 6 months and 0.5% for 2 years.(10)

Additional toxicological information:
No classification data on carcinogenic properties of
this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

C117

Component  LD50 Oral:  Sodium sulfate 10000 mg/kg (Rat)

Eyes:  Eye irritation
Skin:  Skin irritation
Ingestion:  Unknown
Inhalation:  Unknown
Chronic Toxicity:  No information available
Carcinogenicity:  Product is not listed.
Hazard Type:  Skin/Eye irritant.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY DATA:
Aquatic Toxicity: This material has exhibited moderate toxicity to aquatic organisms.

FATE AND TRANSPORT:

BIODEGRADATION:  This material is inorganic and not subject to biodegradation.
PERSISTENCE:  This material is believed to persist in the environment.
BIOCONCENTRATION:  This material is not expected to bioconcentrate in organisms.

ADDITIONAL ECOLOGICAL INFORMATION:
This material has exhibited slight toxicity to terrestrial organisms.

C061

N/A

C117

Component:
Sodium sulfate:

EC50 = 2564 mg/L 48 h
EC50 = 4547 mg/L 96 h
SECTION 13 – DISPOSAL CONSIDERATIONS
C056

Reuse or recycle if possible. Dispose in accordance with all applicable regulations. May be subject to disposal regulations: U.S. EPA 40 CFR 261. Hazardous Waste Number(s): D002 (Corrosive).

C061

Review federal, provincial and local government requirements prior to disposal. Store material for disposal as indicated in Storage Conditions. Disposal by secure landfill may be acceptable.

C117

Waste Disposal Methods: Dispose of contents/container in accordance with local regulation

SECTION 14 – TRANSPORT INFORMATION
C056

U.S. DOT 49 CFR 172.101: UN NUMBER: UN3262
PROPER SHIPPING NAME: Corrosive solid, basic, inorganic, n.o.s. (Sodium Metasilicate)

HAZARD CLASS: DIVISION: 8
PACKING GROUP: 11
LABELING:
REQUIREMENTS:

C061

U.S. DEPARTMENT OF TRANSPORT (DOT) HAZARDOUS MATERIALS SHIPPING INFORMATION (49 CFR):

This chemical is not specifically listed in the U.S. hazardous materials shipping regulations (49 CFR, Table 172-101). However it may be regulated as part of a chemical family or group Not Otherwise Specified (N.O.S.) (cg. mercury- based pesticides). Consult the regulation.

NOTE :
This information (Docket No. HM-215A) was taken from the U.S. Federal Register, Vol. 59, no. 249 (December 1994) and is effective October 1, 1996.

U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

OSHA HAZARD COMMUNICATION EVALUATION:
Does not meet criteria for hazardous material, as defined by 29 CFR 1910.1200.

C117

DOT: Not regulated
ICAO: Not regulated
U.S. REGULATIONS

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103: Not regulated.

HAZARDOUS SUBSTANCES (40 CFR 302.4)

EPCRA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30) Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES: Acute Health Hazard (40 CFR 370.10)

EPCRA SECTION 313: Not regulated. (40 CFR 372.65)


FDA: Sodium Silicates have Generally Recognized as Safe (GRAS) status under specific FDA regulations. Refer to 21 Code of Federal Regulations (CFR) 173, 175, 176, 177, 182, and 184, which is accessible on the FDA’s website. This product is not produced under all current Good Manufacturing Practices (cGMP) requirements as defined by the Food and Drug Administration (FDA).

NATIONAL INVENTORY STATUS:

U.S. INVENTORY STATUS:
Toxic Substance Control Act: All components are listed or exempt
TSCA 12(b): This product is not subject to export notification

C061

Label Hazard Warnings: CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED OR INHALED.

Label Precautions: Keep container closed.
Use with adequate ventilation.
Avoid breathing the dust.
Wash thoroughly after handling.
Avoid contact with, eyes, skin and clothing.

Label First Aid: If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.
In case of contact, immediately flush eyes or skin with plenty of Water for at least 15 minutes. Get medical attention if irritation develops or persist. If
swallowed, give large amounts of water to drink.  
Never give anything by mouth to an unconscious person.  
Get medical attention.

C117

USA Federal Regulations

SARA 313:  
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization:

- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Air Act. Section 112:  
This product does not contain any HAPs.

Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

SECTION 16 – OTHER INFORMATION


*SDS updated by: Timothy Sharpe, TCI Chemist, Childress, TX

Note: Product should be used as directed on the label and no other use is permitted. No warranty is implied expressly or otherwise regarding the accuracy of the information in the product’s suitability for the consumer’s use and the outcome of its use. The technical accuracy of the information submitted herein is based on the data submitted to TCI by the manufacturers for the materials used in this finished product.