

## 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](http://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

| Chemical/Common Name             | CAS No.    | PERCENT | ACGIH/OSHA           |                     | WHMIS |
|----------------------------------|------------|---------|----------------------|---------------------|-------|
|                                  |            |         | TWA                  | PEL                 |       |
| Sodium Metasilicate              | 6834-92-0  | >71     | 3 mg/m <sup>3</sup>  | 3 mg/m <sup>3</sup> | 1%    |
| Sodium Dodecyl benzene sulfonate | 25155-33-0 | ~13     | N/E                  | N/D                 | N/D   |
| Sodium Tripolyphosphate          | 7758-29-4  | ~13     | 5 mg/m <sup>3</sup>  | N/D                 | N/D   |
| Sodium sulfate, disodium sulfate | 7757-82-6  | <1.0    | 10 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> | N/D   |

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.

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## 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  |

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## 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.

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## 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.

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## 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                             |

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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

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## 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 (0.005-0.5M) 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.(1)

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 05% 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.       |

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## SECTION 12 – ECOLOGICAL INFORMATION

C056

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: Water Flea |
| EC50 = 2564 mg/L 48 h |                            |
| EC50 = 4547 mg/L 96 h |                            |

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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

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SECTION 14 – TRANSPORT INFORMATION

C056

U.S. DOT 49 CFR 172.101:  
PROPER SHIPPING NAME:

UN NUMBER: UN3262  
Corrosive solid, basic, inorganic, n.o.s.  
(Sodium Metasilicate)

HAZARD CLASS:  
PACKING GROUP:  
LABELING:  
REQUIREMENTS:

DIVISION: 8  
11  
8

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:  
ICAO:

Not regulated  
Not regulated

|           |               |
|-----------|---------------|
| IATA:     | Not regulated |
| IMDG/IMO: | Not regulated |
| ADR:      | Not regulated |
| ADN:      | Not regulated |

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## SECTION 1.5 – REGULATORY INFORMATION

C056

### U.S. REGULATIONS

OSHA REGULATORY STATUS:  
OSHA Hazard Communication Standard

This material is considered hazardous by the  
(29 CFR 1910 1200)

CERCLA SECTIONS 102a/103:  
HAZARDOUS SUBSTANCES  
(40 CFR 302.4)

Not regulated.

EPCRA EXTREMELY HAZARDOUS:  
SUBSTANCES (40 CFR 355.30)

Not regulated

\_ EPCRA SECTIONS 311/312  
HAZARD CATEGORIES:  
(40 CFR 370.10)

Acute Health Hazard

EPCRA SECTION 313:  
(40 CFR 372.65)

Not regulated.

OSHA PROCESS SAFETY (PSM):  
(29 CFR 1910.119)

Not regulated

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:  
TSCA 12(b):

All components are listed or exempt  
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 persists. 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:  
Hazardous Air Pollutants  
(HAPs) (see 40 CFR 61) This product does not contain any HAPs.

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## SECTION 16 – OTHER INFORMATION

Federal Hazardous Substances Act statutes and Consumer Product Safety Commission regulations: 16 CFR 1500.14(b)(3) and 1500.83(a)(13).

\*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.