



# SAFETY DATA SHEET

## A-5 FORCE

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:**

Product Name: A-5 Force

SDS Date of Preparation: 6/30/25

**Recommended use of the chemical and restrictions on use:**

Recommended use: Powder Enzyme Laundry Detergent

Restrictions on use: None known

**Details of the Supplier of the Safety Data Sheet:****A-1 Products**

1235 E. Kennestone Cir. 2020 Avenue F. Ensley

Marietta, GA 30066 Birmingham, AL 35218

Phone (770) 428-5545 (205) 787-1403

Toll-Free (800) 969-7659

Emergency Telephone Number: Chemtel Inc. 800-255-3924

### 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical: Not Hazardous

Health: Eye Damage Category 1  
Respiratory Sensitization Category 1  
Skin Corrosion Category 1C  
Skin Sensitization Category 1

**GHS Label Elements:**

Danger!

**Statements of Hazard**

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary Phrases**

P260

Do not breathe dust.

P264

Wash thoroughly after handling.

P272

Contaminated work clothing should not be allowed out of the workplace.

P280

Wear protective gloves, protective clothing, eye protection and face protection.

P285

In case of inadequate ventilation wear respiratory protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a Poison Control Center or doctor

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

**Precautionary Phrases, cont'd**

P333 + P313	If skin irritation or rash occurs, get medical attention
P363	Wash contaminated clothing before reuse.
P301 + P330 + P331+310	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Control Center or doctor
P304 + P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 + P315	If experience respiratory symptoms, get immediate medical attention.
P501	Dispose of contents and container in accordance with local, state, and national regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Sodium carbonate	497-19-8	40 – 60%
Sodium tripolyphosphate	7758-29-4	10 – 20%
Sodium metasilicate	6834-92-0	10 – 20%
Proprietary enzymes	Proprietary	< 2%
Sodium carbonate peroxyhydrate	15630-89-4	5 – 10%

The exact concentration is being withheld as a trade secret.

### 4. FIRST AID MEASURES

**Eye:** Immediately flush eyes with plenty of water for at least 30 minutes while holding the eyelids apart. Remove contact lenses, if present and easy to do. Get immediate medical attention.

**Skin:** Immediately flush skin with plenty of water for 20 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Launder clothing before re-use. (Discard contaminated shoes).

**Ingestion:** Do NOT induce vomiting. Get immediate medical attention. If conscious, rinse mouth with a small amount of water and give one glass of water to dilute. Never give anything by mouth to an unconscious or convulsing person.

**Inhalation:** Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

**Most Important Symptoms:** Causes severe eye and skin irritation and burns. Inhalation of dusts may cause mucous membrane and respiratory irritation and burns with possible pulmonary edema. May cause allergic skin and respiratory reaction (sensitization). Harmful or fatal if swallowed or inhaled. Prolonged overexposure may cause damage to eyes, skin, lungs, and teeth.

**Indication of immediate medical attention/special treatment:** Immediate medical attention is required for all routes of exposures.

### 5. FIRE FIGHTING MEASURES

**Suitable (and Unsuitable) Extinguishing Media:** Use media appropriate for surrounding fire. Cool fire exposed containers and structures with water. Do not get water inside containers.

**Specific Hazards Arising from the Chemical:** Sodium metasilicate may react with metals and produce extremely flammable hydrogen gas which can form explosive mixtures with air. Contact between Sodium metasilicate and water may generate large amounts of heat. Inhalation of dusts may cause an allergic reaction. Decomposition will produce oxides of carbon and sodium.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Contain water used in firefighting from entering sewers or natural waterways. Powders that become wet may cause surfaces to be extremely slippery and cause a slip hazard.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Evacuate spill area and keep unprotected personnel away. Prevent contact with the eyes, skin and clothing. Wear appropriate protective clothing. Avoid generating air-born dust. Ventilate area. Keep away from heat, flames and high temperatures. Powders that become wet may cause surfaces to be extremely slippery and cause a slip hazard. Avoid releases to the environment.

**Methods and Materials for Containment and Cleaning Up:** Scoop or shovel up using methods that minimize the generation of airborne dust. Dust deposits should not be allowed to accumulate on surfaces. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Place dry material into an appropriate container for disposal. Wipe spill area with a damp cloth.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid generating or breathing dust. Prevent contact with the eyes, skin and clothing. Wear protective clothing and equipment. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. When diluting, always add caustic to water while stirring to prevent boiling and spattering.

Do not reuse containers. Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for Safe Storage, Including Any Incompatibilities:** Store in a cool, dry, well-ventilated area away from heat and other incompatible materials. Keep container tightly closed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines:

Sodium carbonate	10 mg/m <sup>3</sup> TWA
Sodium metasilicate (as PNOC)	5 mg/m <sup>3</sup> (Respirable fraction), 15 mg/m <sup>3</sup> (total dust) TWA OSHA PEL
Sodium carbonate peroxyhydrate	10 mg/m <sup>3</sup> TWA (inhalable fraction), 3 mg/m <sup>3</sup> TWA (Respirable fraction)

**Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Impervious gloves are recommended.

**Eye Protection:** Chemical safety goggles and face shield are recommended.

**Other:** Impervious coveralls, apron and boots is required to prevent skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b> White powder	<b>Vapor Pressure:</b> Not applicable
<b>Odor:</b> Slight citrus	<b>Vapor Density:</b> Not applicable
<b>Odor Threshold:</b> Not available	<b>Relative Density:</b> Not available
<b>pH, 1% aqueous:</b> 11.5 – 12.0	<b>Solubility(ies):</b> Soluble in water
<b>Melting/Freezing Point:</b> Not available	<b>Octanol/Water Coefficient:</b> Not applicable
<b>Initial Boiling Point/Range:</b> Not applicable	<b>Autoignition Temperature:</b> Not available
<b>Flashpoint:</b> Not applicable	<b>Decomposition Temperature:</b> Not available
<b>Evaporation Rate:</b> Not applicable	<b>Viscosity:</b> Not applicable
<b>Flammable Limits: LEL:</b> Not applicable	<b>Flammability (solid, gas):</b> Not available
<b>UEL:</b> Not applicable	

**10. STABILITY AND REACTIVITY**

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Sodium metasilicate may react with metals to liberate flammable hydrogen gas. Contact with water will generate heat.

**Conditions to Avoid:** Keep away from heat, flames and high temperatures.

**Incompatible Materials:** Acids, bases, oxidizers, and most common metals such as aluminum.

**Hazardous Decomposition Products:** When heated to decomposition emits oxides of carbon and sodium.

**11. TOXICOLOGICAL INFORMATION****HEALTH HAZARDS:**

**Eye:** Contact can cause severe irritation and burns with pain, tearing, and redness. May cause permanent eye damage, vision impairment, and blurred vision.

**Skin:** Contact can cause severe irritation and burns with redness, dermatitis, deep ulcerations and scarring. May cause an allergic skin reaction (sensitization).

**Ingestion:** Ingestion causes severe digestive tract irritation or burns to the mucous membranes, esophagus and stomach with shock and possible perforation and peritonitis. Severe scarring of the throat can occur after swallowing. Ingestion can be fatal.

**Inhalation:** Inhalation of dusts may cause severe irritation and burns of the nose, throat and upper respiratory tract. Prolonged inhalation may cause pulmonary edema and death. May cause allergic respiratory reaction (sensitization).

**Chronic:** Prolonged exposure may cause permanent damage to eye, skin, lungs, and teeth.

**Sensitization:** This material can cause skin and respiratory sensitization.

**Carcinogenicity:** None of the components present are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

**Germ Cell Mutagenicity:** No data available

**Reproductive Toxicity:** No data available

**Numerical Measures of Toxicity:**

Sodium Carbonate: Oral rat LD<sub>50</sub>: 2800 mg/kg, Dermal rabbit LD<sub>50</sub>: >2000 mg/kg,

Inhalation rat LD<sub>50</sub>: 2.30 mg/l/2hr

Sodium tripolyphosphate: Oral rat LD<sub>50</sub>: >2000 mg/kg, Inhalation rat LC<sub>50</sub>: >0.39 mg/L/4hr (no deaths),  
Skin rabbit LD<sub>50</sub>: >4640 mg/kg

Sodium metasilicate: Oral rat LD<sub>50</sub>: 1200-1700 mg/kg, Inhalation rat LD<sub>50</sub>: > 2.06 mg/L/4hr,  
Skin rat LD<sub>50</sub>: >5000 mg/kg

Proprietary enzyme: Oral rat LD<sub>50</sub>: >2880 mg/kg, Inhalation rat LC<sub>50</sub>: >4.44 mg/L/4hr

Sodium Carbonate Peroxyhydrate: Oral rat LD<sub>50</sub>: 1034 mg/kg, Inhalation rat LC<sub>0</sub> - 1 h > 4,580 mg/m<sup>3</sup>

**12. ECOLOGICAL INFORMATION****Ecotoxicity:**

Sodium carbonate: Lepomis macrochirus 96hr LC<sub>50</sub>: 300 mg/L; Ceriodaphnus sp. 48hr EC<sub>50</sub>: 227 mg/L

Sodium metasilicate: Gambusia affinis 96hr LC<sub>50</sub>: 2320 mg/L; Daphnia magna 48hr EC<sub>50</sub>: 1700 mg/L

Sodium carbonate peroxyhydrate: Pimephales promelas 96hr LC<sub>50</sub>: 71 mg/L;  
Daphnia pulex 48hr EC<sub>50</sub>: 4.9 mg/L

This product is expected to be harmful to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

**Persistence and Degradability:** All ingredients are inorganic compounds and are not subject to biodegradation

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** Possible harmful effects to aquatic life due to alkalinity.

**13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with local and national environmental regulations.

**14. TRANSPORT INFORMATION****DOT Hazardous Materials Description:**

**Proper Shipping Name:** Disodium Trioxosilicate Mixture

**UN Number:** UN3253

**Hazard Class/Packing Group:** 8, PG III

**Labels Required:** Corrosive

Note: If >25,000 pounds of this product in a single container, RQ requirements apply.

**IMDG Shipping Name:** Disodium Trioxosilicate Mixture

**UN Number:** UN3253

**IMDG Hazard Class/ Packing Group:** 8, PG III

**IMDG Hazard Labels Required:** Corrosive

**IATA Shipping Name:** Disodium Trioxosilicate Mixture

**UN Number:** UN3253

**IATA Hazard Class/ Packing Group:** 8, PG III

**IATA Hazard Labels Required:** Corrosive

**15. REGULATORY INFORMATION**

**CERCLA 103 Reportable Quantity:** This product has an RQ of 25,000 lbs (based on the RQ of Sodium tripolyphosphate of 5,000 lbs present at 10-20%). Releases above the RQ must be reported to the National Response Center. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** Acute Health

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III

Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on TSCA.

**16. OTHER INFORMATION**

**NFPA Rating:** Health = 3      Flammability = 0      Instability = 1

**HMIS Rating:** Health = 3      Flammability = 0      Reactivity = 1

**SDS Revision History:**

6/30/25 New SDS

The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information, and belief at the date of its publication. This SDS is designed only as a guidance for the products to which it applies. No warranty, express, or implied, is given with regards to the accuracy, completeness, or adequacy of the information contained herein. Regulations requirements are subject to change and may differ between various locations, and it is the user's responsibility to ensure that their activities comply with all federal, state, and local laws. The manufacturer, agent, directors, officers, contractors, or employees of either are not liable to any party for any damages of any nature arising out of or in connection with the accuracy, completeness, adequacy, or furnishing of any information in the SDS.