

PRODUCT NAME: SODA ASH SOLUTIONS (5%, 10%, 17.5%, 20%, 25%, & 27%)

Transportation Emergencies, Call (800) 424-9300 (CHEMTREC)
Health Emergencies, contact Your Local Poison Center

I. PRODUCT INFORMATION

Product Name: Soda Ash Solution **Formula:** Na₂CO₃ in water
Chemical Name: Carbonic acid disodium salt **Chemical Family:** Disodium Carbonate
CAS Number: 497-19-8 (8C19C1) Soda, Soda Ash

<u>Typical Composition</u>	<u>%</u>
Sodium Carbonate	5 - 27%
Water	73-95%

Exposure Standard:

Hazard Ratings: Health = 1 Flammability = 0 Reactivity = 0
0 = Least; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme;

No exposure limits have been established for this material.

II. PERSONAL PROTECTIVE INFORMATION

Ventilation: Local exhaust.

Eye: Face shield and goggles or chemical goggles should be worn.

Skin: Neoprene rubber or plasticized clothing and boots.

Respiratory: Use a NIOSH/MSHA approved respirator, following manufacturer's recommendations where mists or spray may be generated.

Other: Abundant running water should be close at hand in working and storage areas.

III. HEALTH INFORMATION

PHYSIOLOGICAL & HEALTH EFFECTS

Routes of Entry:

Eyes: May cause local necrosis, severe irritant.

Skin: May cause local necrosis, moderate irritant to rabbit skin following 24 hour exposure.

Inhalation: Severe respiratory tract irritant.

Ingestion: Corrosive to gastrointestinal tract.

Toxicity: Acute oral toxicity LD50 for rats is 4000 mg/kg as dry sodium carbonate.

EMERGENCY & FIRST AID PROCEDURES

- Eyes:** Immediately flush the eyes with large quantities of water for a minimum of 15 minutes. Seek medical attention.
- Skin:** Immediately flush with plenty of water; get medical attention if irritation occurs.
- Inhalation:** Remove to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth artificial respiration. Get medical attention immediately.
- Ingestion:** If swallowed, give several glasses of water but **do not** induce vomiting. Seek medical attention immediately.

SYMPTOMS OF OVEREXPOSURE

- Acute:** Mists are irritating to mucous membranes of the respiratory tract, mouth, throat, esophagus, and stomach. Irritating to eyes and skin. May cause corneal damage.
- Chronic:** Irritation to eyes, skin, and respiratory tract tissues.

IV. REACTIVITY DATA

- Stability:** Stable at ambient temperatures. It will begin to decompose and evolve carbon dioxide above temperatures of 752°F (400°C).
- Conditions To Avoid:** Reacts violently with aluminum metal and phosphorus pentoxide.
- Incompatibility:** Reacts with mineral acids to form carbon dioxide. Also reacts with lime to form caustic soda. May react with reducing sugars to form deadly carbon monoxide gas. Proper tank entry and occupancy procedures should be observed.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur.

V. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear, odorless solution	Boiling Point:	5% = 213°F 10% = 214°F
Melting Point:	1564°F (851°C) for dry Na ₂ CO ₃		17.5% = 216°F 20% = 217°F
Vapor Density (air = 1):	N/A		25% = 219°F 27% = 220°F

Vapor Pressure (mmHg & Temp): None

Solubility in water: 100%

pH(as is): 11.5

Specific Gravity (H₂O = 1): at 40°C:

5% - 1.043

10% - 1.094

17.5% - 1.176

20% - 1.203

25% - 1.259

27% - 1.264

Density at 40°C (lb/gal):

5% - 8.68

10% - 9.11

17.5% - 9.80

20% - 10.03

25% - 10.50

27% - 10.54

VI. SPECIAL PRECAUTIONS

Handling and Storage Precautions:

Use black iron, mild steel or stainless steel for storage. Copper, tin, zinc or aluminum and their alloys should be avoided. Product should be stored in insulated tanks and kept above 70°F.

VII. FIRE PROTECTION INFORMATION

Flash Point: Not flammable.

Flammable Limits: Not flammable

Extinguishing Media: Not flammable.

Special Firefighting Procedures:

Not considered a fire hazard. When involved in a fire, does not contribute any unusual hazards. Decomposes to form carbon dioxide, a fire extinguishing agent.

VIII. TRANSPORTATION REQUIREMENTS

DOT Proper Shipping Name: Soda Ash in Water Solution

DOT Classification: Non hazardous/ Not regulated

UN/NA Identification:

Number: N/A

IX. SPILL AND LEAK PROCEDURES

Environmental Impact: Releases to streams may kill aquatic life. Releases to land may react with soil and may penetrate great distances underground posing potential severe environmental impact.

Precaution if Spilled or Released:

Steps should be taken to contain spilled liquids and prevent discharges to streams or sewer systems.

Neutralizing Chemicals: Dilute acid.

Waste Disposal Methods: According to federal, state, and local laws and regulations.

Reportable Quantities: N/A

X. NSF CERTIFICATION

Soda Ash solution (20 – 35%) manufactured at Pasadena, TX is NSF-60 certified. Maximum use in potable water is 286 mg/L.

SALES OFFICE

For Product Information:
TEL: 662-494-3055
FAX: 662-494-2828

Post Office Drawer 1217
West Point, MS 39773

To Place An Order:
TEL: 800-953-3585
FAX: 800-953-3588

IMPORTANT

The information on this Material Safety Data Sheet is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.