SAFETY DATA SHEET
FOR
THORN SMITH LABORATORIES

SECTION 1 - IDENTIFICATION

Trade Name:	**Sodium Carbonate**
Catalog Number:	81-1075 (100g) / 81-1076 (500g)
Product Description:	Student Reference Standards and Reagent Chemicals
Manufacturer:	Auric Enterprises, Inc. d/b/a Thorn Smith Laboratories
Address:	7755 Narrow Gauge Road Beulah, MI 49617
Phone Number:	231-882-4672
SDS Number:	TSL-101

SECTION 2 – HAZARDS IDENTIFICATION

Classification of Substance or Mixture: Not a hazardous substance or mixture as packaged in 100g or 500g containers.

GHS Label Elements, including precautionary statements: Not a hazardous substance or mixture as packaged in 100g or 500g containers.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Potential Acute Health Effects:
Cause mild skin irritation. Causes serious eye irritation. Acute oral toxicity. May be harmful if swallowed.

Potential Chronic Health Effects:
This substance may be toxic to upper respiratory tract, skin, and eyes. Repeated or prolonged exposure to the substance can produce target organs damage.

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Sodium Carbonate

Common Synonyms:	Soda Ash, Disodium Carbonate (Monohydrate)
Formula:	$NaCO_3$
CAS No.:	497-19-8
Purity:	99% Purity or higher

SECTION 4 – FIRST AID MEASURES

Eye Contact: Do not rub eye(s); check for and remove contact lenses. Flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. If irritation persists, seek medical attention.

Skin Contact: Irritant. Remove any contaminated clothing. Wipe off excess from skin. Immediately wash skin with soap and water for at least 15 minutes. Get

medical attention if irritation develops or persists.

Inhalation: If a person breathes in large amounts, move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: If swallowed, and if person is conscious, immediately give large amounts of water. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flammability: Non-Flammable
Flash Points: Not Applicable
Auto-Ignition: Not Applicable
Flammable Limits: N/A
Products of Combustion: Emits Na_2O fumes when heated to decomposition.
Extinguishing Media: Use extinguishing media appropriate to the surrounding fire.
Fire Fighting Procedure: Firefighters should wear self-contained breathing apparatus and protective clothing to prevent inhalation or contact with skin and eyes.
Fire/Explosion Hazards: Sodium Carbonate can ignite and burn fiercely in contact with fluoride. Sodium Carbonate in contact with fluorine decomposed at ordinary temperature with incandescence. Reacts explosively with red-hot aluminum metal. Sodium Carbonate + ammonia in arabic gum solution will explode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Utilize recommended protective clothing and equipment. Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of in accordance to all Federal, State and Local environmental regulations.

SECTION 7 – HANDLING AND STORAGE

Storage Temperatures: Hygroscopic. Do not store above 24°C (75.2°F).
Storage: Suitable for any general chemical storage area.
Shelf Life: Unlimited in tightly closed container.
Special Sensitivity: Isolate from incompatibles such as acid.
Precautions to be taken in handling and storage: Store in accordance with all local, state, and federal environmental regulations.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type): None where adequate ventilation conditions exist. If airborne Concentration is high, use an appropriate respirator or dust mask.
Protective Gloves: Wear protective gloves.
Eye Protection: Wear chemical safety glasses.
Ventilation To Be Used: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.
__X__ Local Exhaust __X__ Mechanical (General) _____ Special
_____ Other (Specify)
Other Protective Clothing and Equipment: Wear clean body-covering clothing. Emergency showers and eye was stations should be available.

Hygienic Work Practices: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Solid powder
Color: White
Odor: Odorless
Molecular Weight: 105.99 g/mole
pH (1% soln/water): 11.5 (Basic)
Specific Gravity(water = 1): 2.532
Boiling Point: N/A
Melting Point: 851°C (1583.8°F)
Solubility: Hot water and glycerol. Partially soluble in cold water. Insoluble in acetone, alcohol.
Water Reactive: No
Vapor Pressure: N/A
Vapor Density (Air-1): N/A
Evaporation Rate (-1): N/A

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: __X__ Stable _____ Unstable
Conditions to Avoid: Heat. Stable under ordinary conditions of use and storage.
Incompatibility (Materials to avoid): Moisture. Hygroscopic. Incompatible with phosphorus pentoxide, lithium, fluorine, fluoride, ammonia + silver nitrate, 2,4,6-trinitrotoluene, ammonia, acids, sodium sulfide + water, hydrogen peroxide, red hot aluminum metal, sodium sulfide, zinc, calcium hydroxide. Reacts violently with F2, Lithium, and 2,4,6-trinitrotoluene.
Hazardous Decomposition Products: Sodium begins to decompose to 400 C to evolve CO2. Sodium begins to decompose by acids with effervescence.
HAZARDOUS POLYMERIZATION: _____ May Occur __X__ Will Not Occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure: Ingestion. Inhalation.
Toxicity Data: Acute oral toxicity LD50 (rat) 4090 mg/kg
Acute toxicity to dust LC50 (mouse) 1200 mg/m^3 2 hours
LDL (man) 714 mg/kg
Chronic Toxic Effects: Inhalation may result in decreased pulmonary function, nasal congestion, nosebleeds, perforation of the nasal septum. Chronic exposure may cause dermatitis and ulceration of the skin and gastrointestinal complaints. However, the effects of Chronic exposure seem reversible if exposure is decreased.
Acute Toxic Effects: Inhalation of dust may cause irritation to upper respiratory tract and mucous membranes.
Large ingested doses my cause gastrointestinal irritation and pain.
May cause possible irritation and/or burns to eyes and skin.
Extremely Hazardous Substance: No
CERCLA Hazardous Substance: No
SARA 313 Toxic Chemicals: No
TSCA Inventory: No

SECTION 12 – ECOLOGICAL INFORMATION

Long term degradation products may arise.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal environmental regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Domestic (D.O.T.)
Proper Shipping Name: Chemicals, n.o.s.

International (T.M.O.)
Proper Shipping Name: Chemicals, n.o.s.

Air (I.C.A.O.)
Proper Shipping Name: Chemicals, n.o.s.

SECTION 15 – REGULATORY INFORMATION

SARA TITLE III HAZARD CATEGORIES AND LISTS

Acute: Yes Chronic: No Flammability: No Pressure: No Reactivity: Yes

NFPA Rating: Health: 2 Flammability: 0 Reactivity: 1
HMIS Rating: Health: 2 Fire: 0 Reactivity: 1 Protection: E

SECTION 16 – OTHER INFORMATION

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