

THOMPSON-HAYWARD CHEMICAL COMPANY  
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SODA ASH NATURAL LIGHT 50#      DATE: 07/13/88 PAGE 01  
PRODUCT CODE: 16-07990-02

CAS # 000497-19-8

FORMULA: Na(2)CO(3)

CHEMICAL FAMILY: Sodium Salts

CHEMICAL NAME AND SYNONYMS: Sodium carbonate; Salsoda; Trona soda ash; Soda Ash; Disodium carbonate;

SUPPLIERS NAME: Thompson-Hayward Chemical Company  
5200 Speaker Rd  
Kansas City Ks 66106  
SUPPLIERS PHONE NUMBER: 913-321-3131  
TRANSPORTATION EMERGENCY PHONE NUMBER: 1-800-424-9300

SECTION I Hazardous Ingredients

<u>Ingredient</u>	<u>Percent</u>	<u>TLV</u>
Sodium carbonate	approx. 100%	NUISANCE PARTICULATES PEL TWA 8Hr 15 mg/m(3) Total Dust, PEL TWA 8Hr 5 mg/m(3) Respirable Dust OSHA TLV TWA 8Hr 10 mg/m(3) Total Dust ACGIH

SECTION II Health Hazards

Threshold Limit Value: As indicated in Section I

Potential Effects of Exposure:

Eyes: Particles in the eye may cause severe irritation and damage to the tissue. Corneal opacities and irritation occurred in rabbit eye tests. Toxicology 23.281-291 1982.

Skin: Prolonged skin contact may have a dehydrating effect and cause allergic reactions for some people. Repeated contact may cause redness and dry cracked skin. Minor irritation may occur on abraded skin.

Inhalation: Inhalation of dust may cause nasal irritation and sneezing.

Ingestion: Swallowing may cause immediate irritation and possible damage to tissue of mouth and gastrointestinal tract.  
LD(50)(rat) 2.8 gm/kg. Ingestion of large amounts may cause vomiting, diarrhea, circulatory collapse, and death.

First aid:

Eyes: Flush with water for 15 minutes while holding eyelids open. Get medical attention.

Skin: Frequent washing is recommended. In warm weather, soda ash dust in contact with perspiration can cause irritation.

CONTINUED ON PAGE 02

THOMPSON-HAYWARD CHEMICAL COMPANY  
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SODA ASH NATURAL LIGHT 50#  
PRODUCT CODE: 16-07990-02

DATE: 07/13/88 PAGE 02

SECTION II Health Hazards

CONTINUED

Inhalation: Remove victim to fresh air, provide oxygen if breathing is difficult. If prolonged exposure has occurred, obtain medical attention. Note (a) under Other Information.

Ingestion: Obtain immediate medical attention. DO NOT induce vomiting. Do not attempt to neutralize with other chemicals. If patient is conscious give large quantities of milk or water to drink. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Other Information:

Coughing, sneezing or other symptoms of upper respiratory irritation may serve as a warning of exposure to high airborne concentrations.

Eye or skin disease and breathing or respiratory disorders will be aggravated by exposure to this chemical.

NOTE TO PHYSICIAN: While internal toxicity is low, irritant effects of high concentrations may produce corneal opacities and vesicular skin reactions in humans with abraded skin only. Treatment is symptomatic and supportive.

Not reported as carcinogenic by NTP, IARC, or OSHA.

SECTION III Special Protection Information

Respiratory Protection: Dust type respirator recommended where exposure exceeds PEL/TLV limitations.

Ventilation Required: Ventilation adequate to maintain particulate level below PEL/TLV is recommended.

Protective Clothing:

Eyes: Hardhat and/or other head covering and chemical safety goggles. Do not wear contact lenses.

Skin: Rubber gloves for solutions, cotton gloves sufficient for dry product.

Additional Protective Measures: Safety shower, eye bath and washing facilities should be available.

SECTION IV Fire & Explosion Hazard Data

Flash Point (Method): Non-flammable

Flammable Limits (% Volume in Air):

Upper: N/A

Lower: N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

CONTINUED ON PAGE 03

THOMPSON-HAYWARD CHEMICAL COMPANY  
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SODA ASH NATURAL LIGHT 50#      DATE: 07/13/88 PAGE 03  
PRODUCT CODE: 16-07990-02

SECTION IV Fire & Explosion Hazard Data

CONTINUED

Unusual Fire and Explosion Hazards: N/A

SECTION V Physical Data

Boiling Point: Decomposes above 725 deg. F (400 deg. C) begins to evolve carbon dioxide. Decomposes fully @ 1800 deg. F.

Melting Point: 1564 deg. F. (851 deg. C)

Specific Gravity (H<sub>2</sub>O=1): 2.533

Bulk Density: 75 to 50lbs./cu.ft.

Vapor Pressure (MM HG.): N/A

Vapor Density (AIR=1): N/A

Evaporation Rate (\_\_\_\_=1): N/A

Solubility in Water: 22.5% by weight at 77 deg. F

Percent Volatile by Volume: N/A

pH: 1% solution 11.4

Appearance and Odor: White granular solid-no odor

SECTION VI Reactivity Data

Stability: Will gradually absorb water from the atmosphere to form the monohydrate. In the presence of moisture also reacts with carbon dioxide from the air to form sodium bicarbonate or the more stable sodium sesquicarbonate (Na<sub>2</sub>CO<sub>3</sub>-NaHCO<sub>3</sub>-2H<sub>2</sub>O).

Incompatibility: May react violently when neutralized with acids; carbon dioxide and large quantities of heat can be evolved. Reacts with hydrated lime in the presence of moisture to form corrosive caustic soda. Keep away from aluminum powder, fluorine, phosphorus pentoxide, sulfuric acid, ammoniacal silver nitrate and molten lithium. Do not expose to intense heat.

Hazardous Decomposition Products: Soda ash decomposes at temperatures above 1000C, releasing carbon dioxide gas (CO<sub>2</sub>). Carbon dioxide is an asphyxiant and may affect respiration rate or interfere with breathing. The sodium oxide residue sublimates at 1275 deg. C, forming vapors and mists of caustic soda on contact with moisture or water.

Hazardous Polymerization: Will not occur.

CONTINUED ON PAGE 04

THOMPSON-HAYWARD CHEMICAL COMPANY  
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

-----  
PRODUCT NAME: SODA ASH NATURAL LIGHT 50#                      DATE: 07/13/88 PAGE 04  
PRODUCT CODE: 16-07990-02

SECTION VII Spill and Leak Procedures

Steps to be taken if material is released or spilled:

If uncontaminated, sweep up or collect, and reuse as product.  
If contaminated with other materials, collect in suitable  
containers. Dike to contain, dissolve residue in water,  
neutralizing as described in Waste Disposal Method.

Waste Disposal Method:

Soda ash is considered to be non-hazardous by EPA under 40 CFR  
116-117, and if disposed as waste, the RCRA status of unused  
material is non-hazardous under 40 CFR 261. If permitted by  
applicable Federal, State, and local regulations bury in a  
solid waste landfill. If in solution, neutralize with acid and  
flush to sewer with plenty of water, also if permitted by the  
regulatory authorities. Good ventilation required during  
neutralization to release Carbon dioxide gas. Disposal may  
have to be handled by an approved contractor using an approved  
disposal facility.

SECTION VIII D.O.T. Shipping Information

-----  
Proper Shipping Name:                      NONE  
Hazard Class:                              NONE  
ID Number:                                 NONE  
Label Requirements:                      NONE  
Reportable Quantity:                    NONE  
Other Information:

SECTION IX Additional Information

-----  
This information may be of importance to you:

Avoid simultaneous exposure to soda ash and lime dust. In the  
presence of moisture these combine to form caustic soda (NaOH),  
which may cause burns. Store in a cool dry area away from  
strong acids. Keep covered to help prevent moisture pickup.  
Prolonged storage may cause product to cake from atmospheric  
moisture. When dissolving, add to water cautiously and with  
stirring; solutions can get hot.

NPCAHMIS 100C

THOMPSON-HAYWARD CHEMICAL COMPANY  
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SODA ASH NATURAL LIGHT 50#  
PRODUCT CODE: 16-07990-02

DATE: 07/13/88 PAGE 05

\*\*\*\*\* E N D O F R E P O R T \*\*\*\*\*

NAME: GENE TURNER

DATE ISSUED: 11/01/1985  
DATE REVISED: 10/28/1987

< = LESS THAN  
> = MORE THAN

N/A = NOT APPLICABLE  
N/D = NOT DETERMINED  
N/E = NOT ESTABLISHED

UNK = UNKNOWN

The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. Thompson-Hayward Chemical Co. provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration and investigation. You should satisfy yourself that you have all current data relevant to your particular use. Thompson-Hayward Chemical Company knows of no medical condition, other than those noted on this material safety data sheet, which are generally recognized as being aggravated by exposure to this product.