

Approved by:

*Zoraly Anthony*

June 21, 2010

## **SECTION 1. PRODUCT IDENTIFICATION**

Name: Sodium Carbonate, 100%  
Synonym: Carbonic Acid, Disodium Salt; Disodium Carbonate; Soda Ash  
Manufacturer: Nacalai Tesque (Japan)  
Catalog Number: 630-0092-01 (Shimadzu), 44936-42 (Nacalai Tesque)

Additional Information Contact: 800.477.1227  
24 Hour Emergency Contact: 410-768-8155 (AIRPACK; 500 McCormick Dr.; Glen Burnie, MD 21061)

## **SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS Number: 497-19-8  
Molecular Weight: 105.99  
Chemical Formula:  $\text{Na}_2\text{CO}_3$   
Hazardous:

## **SECTION 3. PRODUCT USE & HANDLING**

This product is specifically for use in the IC channel of the TOC-500, TOC-5000 Series, TOC-V Series and TOC-4000 Series of Shimadzu Total Organic Carbon analyzers. Refer to the appropriate instruction manual for directions on proper use. Keep tightly sealed in a cool, dry, well ventilated place. Store separate from flammable and combustible materials. Wear appropriate protective clothing and eye protection: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES.

## **SECTION 4. PHYSICAL DATA**

Appearance:	White powder/granules	Odor:	Odorless
Melting Point:	851°C (1564°F)	Boiling Point:	Decomposes
Density:	N/A	Vapor Pressure:	N/A
pH:	11.6 Aqueous solution	Specific Gravity:	2.53
Solubility:	45.5g/100ml water @ 100C (212F)		

## **SECTION 5. HAZARDS IDENTIFICATION**

**DANGER! MAY CAUSE EYE BURNS. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT.**

Health Risk: Slight  
Flammability: None  
Reactivity: Slight  
Contact Risk: Moderate  
Storage Risk: General Storage

## **SECTION 6. TOXICITY DATA**

ORL-RAT LD50:	4090 mg/kg	IHL-RAT LC50:	2300 mg/M <sup>3</sup> /2Hr
ORL-MUS LD50:	6600 mg/kg	IHL-MUS LC50:	1200 mg/M <sup>3</sup> /2Hr
SCU-MUS LD50:	2210 mg/kg	IHL-GPG LC50:	800 mg/M <sup>3</sup> /2Hr

Environmental Fate: None Found  
Environmental Toxicity: None Found

## **SECTION 7. HEALTH HAZARD DATA**

Inhalation: Inhalation of dust may cause irritation to the respiratory tract. Symptoms from excessive inhalation of dust may include coughing and difficult breathing. Excessive contact is known to cause damage to the nasal septum.

Ingestion: Sodium carbonate is slightly toxic. Large doses may be corrosive to the gastro-intestinal tract where symptoms may include severe abdominal pain, vomiting, diarrhea, collapse and death.

Skin Contact: Excessive contact may cause irritation with blistering and redness. Solutions may cause severe irritation or burns.

Eye Contact: Contact may be corrosive to eyes and cause conjunctival edema and corneal destruction. Risk of serious injury increases if eyes are kept tightly closed. Other symptoms may appear from absorption of sodium carbonate into the bloodstream via the eyes.

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### **SECTION 8. FIRST-AID MEASURES**

- Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **GET MEDICAL ATTENTION.**
- Ingestion: If swallowed, **DO NOT INDUCE VOMITING.** Give large quantities of water. Never give anything by mouth to an unconscious person. **GET MEDICAL ATTENTION.**
- Skin Contact: Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. **GET MEDICAL ATTENTION.** Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. **GET MEDICAL ATTENTION.**

**Note to Physician:** Consider endoscopy in all suspected cases of sodium carbonate poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

### **SECTION 9. FIRE FIGHTING MEASURES**

- Noncombustible: Use extinguishing media appropriate to surrounding fire conditions.
- Special Information: Use self-contained breathing apparatus and protective clothing appropriate to surrounding fire conditions.
- Fire/explosion hazard: Emits toxic fumes under fire conditions.

### **SECTION 10. ACCIDENTAL RELEASE MEASURES**

Evacuate area. Wear disposable coveralls and discard them after use. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust, ventilate area and wash spill site after material pickup is complete.

### **SECTION 11. STABILITY AND REACTIVITY**

- Incompatible materials: Strong Acids, Aluminum, Protect from Moisture.
- Hazardous combustion products: Carbon Monoxide, Carbon Dioxide
- Hazardous decomposition products: Carbon Monoxide, Carbon Dioxide.

### **SECTION 12. DISPOSAL**

Dispose of container and unused contents in accordance with Federal, State, and Local requirements. State and Local disposal regulations may differ from Federal regulations and can be more stringent, but will never be less strict.

### **SECTION 13. OTHER INFORMATION**

Chemical Inventory Status - Part 1				
Ingredient	TSCA	EC	Japan	Australia
Sodium Carbonate (497-19-8)	Yes	Yes	Yes	Yes

Chemical Inventory Status - Part 2				
Canada				
Ingredient	Korea	DSL	NDSL	Phil.
Sodium Carbonate (497-19-8)	Yes	Yes	No	Yes

Federal, State & International Regulations - Part 1				
Ingredient	SARA 302		SARA 313	
	RQ	TPQ	List	Chem. Cat.
Sodium Carbonate (497-19-8)	No	No	No	No

Federal, State & International Regulations - Part 2			
Ingredient	CERCLA	RCRA	TSCA
		261.33	8(d)
Sodium Carbonate (497-19-8)	No	No	No

**MATERIAL SAFETY DATA SHEET: SODIUM CARBONATE****REV: 3****Page: 3 of 3****Approved by:***Jessie Anthony***June 21, 2010**

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: No

SARA 311/312:

Acute: Yes      Chronic: No      Fire: No      Pressure: No

Australian Hazchem Code: No information found.

Poison Schedule: S5

Transportation Information: Not Regulated

The information provided above is believed to be correct, but does not purport to be all inclusive and it must serve only as a guide. Shimadzu shall not be held liable for any damage resulting from handling or contact with the above product. Users should make their own determinations regarding the suitability of this information for their particular purposes