

# MATERIAL SAFETY DATA SHEET

## IDENTIFICATION

Stratagene Cloning Systems  
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La Jolla, CA 92037

Date of Last Update: 6/16/00  
Phone #: 800-894-1304  
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Catalog # : 1042-13  
CAS # : 497-19-8

Product Name: Sodium Carbonate  
EC #: 207-838-8

## HAZARDOUS COMPONENTS

Chemical Name & Synonyms: Sodium carbonate, (Carbonic acid, disodium salt, Crystol carbonate, Disodium carbonate, Soda ash, Solvay soda, Trona)

OSHA PEL Limits: N/A  
ACGIH TLV: N/A  
Other Limits Recommended: N/A

KIT	Sodium Carbonate -containing component	%
200383 $\beta$ -Galactosidase Assay Kit	200383-16 Stop Solution	10.6%

## TOXICITY DATA

### Irritation Data

SKN-RBT	500 mg/24 hr MLD	28ZPAK -,7,72
EYE-RBT	100 mg/24 hr MOD	28ZPAK -,8,72
EYE-RBT	100 mg/30 sec rinse MLD	TXCYAC 23, 281, 82
EYE-RBT	50 mg SEV	GTPZAB 20 (11), 55, 76

### Toxicity Data

ORL-RAT	LD <sub>50</sub> : 4090 mg/kg	28ZPAK -,8,72
IHL-RAT	LC <sub>50</sub> : 2300 mg/m <sup>3</sup> /2 hr	ENVRAL 31, 138, 83
ORL-MUS	LD <sub>50</sub> : 6600 mg/kg	GTPZAB 20 (11), 55, 76
IHL-MUS	LC <sub>50</sub> : 1200 mg/m <sup>3</sup> /2 hr	ENVRAL 31, 138, 83
IPR-MUS	LD <sub>50</sub> : 117 mg/kg	COREAF 257, 791, 63
SCU-MUS	LD <sub>50</sub> : 2210 mg/kg	RPTOAN 33, 266, 70
IHL-GPG	LC <sub>50</sub> : 800 mg/m <sup>3</sup> /2 hr	ENVRAL 31, 138, 83

### Reviews, Standards, and Regulations

OEL=MAK  
EPA FIFRA 1988 Pesticide subject to registration or re-registration. FEREAC 54, 7740, 89  
NOHS 1974: HZD 68850; NIS 389, TNF 148455; NOS 193; TNE 1143671  
NOES 1983: HZD 68850; NIS 385, TNF 97764; NOS 220; TNE 2001842; TFE 761463  
EPA GENETOX Program 1988, Inconclusive: *E. Coli* POLA without S9  
EPA TSCA Section 8(B) Chemical Inventory  
EPA TSCA Test Submission (TSCATS) Data Base, October 1995

#### Target Organ Data

Effects on fertility (pre-implantation mortality)

Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

RTECS#: VZ4050000, Sodium carbonate (2:1)

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### Health Hazard Data

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#### Acute Effects

Harmful if swallowed, inhaled, or absorbed through skin.

Causes severe irritation.

High concentrations are extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes, and skin.

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

To the best of our knowledge, the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

#### Chronic Effects

No data available.

#### First Aid

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

In case of skin contact, flush skin with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

If inhaled, remove to fresh air. If breathing becomes difficult, give oxygen. If not breathing, give artificial respiration.

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician..

Wash contaminated clothing before reuse.

Discard contaminated shoes.

**In all cases contact a physician immediately.**

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### Physical Data

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#### Appearance and Odor

White granular powder.

#### Physical Properties

Molecular formula       $\text{Na}_2\text{CO}_3$

Melting point             $851^\circ\text{C}$

Specific gravity          2.532

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### Fire and Explosion Hazard Data

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#### Extinguishing Media

Noncombustible.

Use extinguishing media appropriate to surrounding fire conditions.

#### Special Firefighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.

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## Reactivity Data

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### Incompatibilities

Strong acids.  
Aluminum.  
Protect from moisture.

### Hazardous Combustion or Decomposition Products

Carbon monoxide, carbon dioxide.

### Stability

No data available.

### Hazardous polymerization

No data available.

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## Spill or Leak Procedures

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### Steps to be taken if Material is Released or Spilled

Evacuate area.  
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.  
Wear disposable coveralls and discard them after use.  
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.

### Waste Disposal Method

For small quantities, cautiously add to a large stirred excess of water. Adjust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous-waste disposal. Flush the aqueous solution down the drain with plenty of water. The hydrolysis and neutralization reactions may generate heat and fumes which can be controlled by the rate of addition.  
Observe all federal, state, and local environmental regulations.

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## Precautions to be Taken in Handling and Storage

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### Label Precautionary Statements

Toxic (USA definition)  
Harmful (European definition)  
Harmful by inhalation, in contact with skin, and if swallowed.  
Causes severe irritation.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Wear suitable protective clothing, gloves, and eye/face protection.  
Do not breathe dust.

#### Exposure Controls and Personal Protection

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, and other protective clothing.

Use only in a chemical fume hood.

Ensure a safety bath and eye shower are present.

Use a faceshield (8-inch minimum).

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Avoid prolonged or repeated exposure.

Wash thoroughly after handling.

Toxic.

Severe irritant.

Keep tightly closed.

Store in a cool dry place.

#### Additional Information

Reacts vigorously with fluorine.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Stratagene shall not be held liable for any damage resulting from handling or from contact with the above product.