

Creation Date Oct-2013

Revision Date Oct-2018

Revision Number 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Description:** Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate  
**Product Grade:** CVS  
**Cat No. :** Q37123  
**Synonyms** None

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### 1.3. Details of the supplier of the safety data sheet

**Company** Thermo Fisher Scientific India Pvt. Ltd  
403-404, B-wing, Delphi, Hiranandani Business Park,  
Powai, Mumbai 400076, INDIA.  
**E-mail address** [laboratorysolutions@thermofisher.com](mailto:laboratorysolutions@thermofisher.com)

### 1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30  
Chemtrec US: (800)424-9300  
Chemtrec EU: 001(202)483-7616

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

##### **Physical hazards**

Based on available data, the classification criteria are not met

##### **Health hazards**

Based on available data, the classification criteria are not met

##### **Environmental hazards**

Based on available data, the classification criteria are not met

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

**R-phrases(s)** none

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

### 2.2. Label elements

#### **Hazard Statements**

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## Precautionary Statements

### 2.3. Other hazards

None known

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Sodium carbonate	497-19-8	EEC No. 207-838-8	5.5-6	Eye Irrit. 2 (H319)	Xi; R36
Water	7732-18-5	231-791-2	94-94.5	-	-

Component	Reach Registration Number
Sodium carbonate	01-2119485498-19

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Do not induce vomiting. Obtain medical attention.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
<b>Protection of First-aiders</b>	No special precautions required.

### 4.2. Most important symptoms and effects, both acute and delayed

No information available

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## Hazardous Combustion Products

Sodium oxides.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

### 6.2. Environmental precautions

Should not be released into the environment.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash hands before breaks and immediately after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s):

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Sodium carbonate					TWA: 5 mg/m <sup>3</sup> 8 hodinách. Ceiling: 10 mg/m <sup>3</sup>
Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Sodium carbonate					TWA: 1 mg/m <sup>3</sup> 8 ore STEL: 3 mg/m <sup>3</sup> 15 minute

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

## Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

**Derived No Effect Level (DNEL)** No information available.

<u>Route of exposure</u>	<u>Acute effects (local)</u>	<u>Acute effects (systemic)</u>	<u>Chronic effects (local)</u>	<u>Chronic effects (systemic)</u>
Oral Dermal Inhalation				

**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2. Exposure controls

### Engineering Measures

None under normal use conditions..

### Personal protective equipment

#### Eye Protection

Safety glasses with side-shields (European standard - EN 166)

#### Hand Protection

Protective gloves

<u>Glove material</u>	<u>Breakthrough time</u>	<u>Glove thickness</u>	<u>EU standard</u>	<u>Glove comments</u>
Natural rubber Nitrile rubber Neoprene PVC	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

#### Respiratory Protection

No protective equipment is needed under normal use conditions.

#### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced..  
**Recommended Filter type:** Particle filter.

#### Small scale/Laboratory use

Maintain adequate ventilation

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

### Environmental exposure controls

No information available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

Appearance	Colorless	
Physical State	Liquid.	
Odor	odorless	
Odor Threshold	No data available	
pH	No information available.	
Melting Point/Range	0°C / 32°F	
Softening Point	No data available	
Boiling Point/Range	100°C / 212°F	
Flash Point	No data available	Method - No information available.
Evaporation Rate	> 1 (Ether = 1.0)	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available.	
Vapor Pressure	14 mmHg @ 20 °C	
Vapor Density	0.7	(Air = 1.0)
Specific Gravity / Density	~ 1.0	
Bulk Density	Not applicable	Liquid
Water Solubility	miscible	
Solubility in other solvents	No information available.	
Partition Coefficient (n-octanol/water)		
Autoignition Temperature	No data available	
Decomposition temperature	No data available	
Viscosity	No data available	
Explosive Properties	No information available.	
Oxidizing Properties	No information available.	

## 9.2. Other information

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

#### Hazardous Polymerization

Hazardous polymerization does not occur.

#### Hazardous Reactions

None under normal processing.

### 10.4. Conditions to avoid

Incompatible products, Excess heat.

### 10.5. Incompatible materials

Acids.

### 10.6. Hazardous decomposition products

Sodium oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## SECTION 11: TOXICOLOGICAL INFORMATION

**Product Information** No acute toxicity information is available for this product

**(a) acute toxicity;**

**Oral**

Based on available data, the classification criteria are not met

**Dermal**

Based on available data, the classification criteria are not met

**Inhalation**

Based on available data, the classification criteria are not met

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium carbonate	2800 mg/kg ( Rat )	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** No data available

**(d) respiratory or skin sensitization;**

**Respiratory**

No data available

**Skin**

No data available

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;** No data available

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs**

None known.

**(j) aspiration hazard;**

No data available

**Symptoms / effects,  
both acute and delayed**

No information available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Sodium carbonate	Lepomis macrochirus: LC50: 300 mg/L/96h Gambusia affinis: LC50: 740 mg/L/96h	265 mg/L EC50 = 48 h	242 mg/L EC50 = 120 h	

### 12.2. Persistence and degradability

#### Persistence

Soluble in water, Persistence is unlikely, based on information available.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## **12.4. Mobility in soil**

The product is water soluble, and may spread in water systems. . Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

## **12.5. Results of PBT and vPvB assessment**

No data available for assessment

## **12.6. Other adverse effects** **Endocrine Disruptor Information** **Persistent Organic Pollutant** **Ozone Depletion Potential**

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance

This product does not contain any known or suspected substance

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1. Waste treatment methods**

#### **Waste from Residues / Unused Products**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### **Contaminated Packaging**

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

#### **European Waste Catalogue (EWC)**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

#### **Other Information**

Waste codes should be assigned by the user based on the application for which the product was used

## **SECTION 14: TRANSPORT INFORMATION**

### **IMDG/IMO**

Not regulated

#### **14.1. UN number**

#### **14.2. UN proper shipping name**

#### **14.3. Transport hazard class(es)**

#### **14.4. Packing group**

### **ADR**

Not regulated

#### **14.1. UN number**

#### **14.2. UN proper shipping name**

#### **14.3. Transport hazard class(es)**

#### **14.4. Packing group**

### **IATA**

Not regulated

#### **14.1. UN number**

#### **14.2. UN proper shipping name**

#### **14.3. Transport hazard class(es)**

#### **14.4. Packing group**

#### **14.5. Environmental hazards**

No hazards identified

#### **14.6. Special precautions for user**

No special precautions required

#### **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable, packaged goods

## **SECTION 15: REGULATORY INFORMATION**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

## International Inventories

X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Sodium carbonate	207-838-8	-		X	X	-	X	X	X	X	X
Water	231-791-2	-		X	X	-	X	-	X	X	X

## National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Sodium carbonate	WGK 1	

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R36 - Irritating to eyes

### Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Industrial Hygiene

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japan Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** - Predicted No Effect Concentration

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - Volatile Organic Compounds

### Key literature references and sources for data

Suppliers safety data sheet,

Chemadviser - LOLI,

Merck index,

RTECS

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards**

On basis of test data

**Health Hazards**

Calculation method

**Environmental hazards**

Calculation method



# SAFETY DATA SHEET

Sodium carbonate solution 0.05M (0.1N) ampoule Solutrate

Revision Date Oct-2018

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## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Creation Date** Oct-2013

**Next Revision Date** Oct-2023

**Revision Summary** SDS section 1 updated and update of Format.

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

## Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**