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Date: February 28th, 2020

Version: 0001



# Section 1 - Product and Company Identification

1.1 Product name: Synple Chem reagent cartridge
 1.2 Product code: Boc protection B001 and B002
 1.3 Recommended Use: Laboratory chemical consumable

**1.4 Company Name:** Synple Chem AG,

Vladimir-Prelog-Weg 3, CH-8093 Zürich,

Switzerland

**1.5 Contact Details:** Telephone: +41 (0)44 633 42 95

8:00 a.m. – 5:00 p.m. CET email: info@synplechem.com

# Section 2 - Hazards Identification

#### 2.1 Classification of the substance or mixture

Labelling according to Regulation (EC) No 1272/2008

## Di-tert-butyl dicarbonate

Flammable liquids (Category 3), H226 Acute toxicity, Inhalation (Category 2), H330 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Skin sensitisation (Category 1), H317

#### Celite

Specific target organ toxicity - repeated exposure, Inhalation (Category 1), Lungs, H372 Specific target organ toxicity - repeated exposure, Inhalation (Category 2), H373

### Si-triethylamine

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318

#### Si-trisamine

Not a dangerous substance according to GHS
This product is not classified as dangerous according to Directive 67 / 548 / EEC

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

### Di-tert-butyl dicarbonate

Pictogram







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Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H330 Fatal if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P280 Wear protective gloves.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes.

P305 + P351 + P338 Remove contact lenses, if present and easy to do. Continue

rinsing.

Supplemental Hazard

Statement(s)

none

Celite

Pictogram



Signal word Danger

Hazard statement(s)

H372 Causes damage to organs (Lungs) through prolonged or

repeated exposure if inhaled.

H373 May cause damage to organs through prolonged or repeated

exposure if inhaled.

Precautionary statement(s)

P314 Get medical advice/ attention if you feel unwell.

Supplemental Hazard

Statement(s)

none

Si-triethylamine

Pictogram



Signal word Warning

Hazard statement(s)

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H332 Harmful if inhaled. H320 Causes eye irritation.

Precautionary statement(s)

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P304 + P340 + P341 IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P301 +P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Supplemental Hazard

Statement(s)

none

#### Si-trisamine

Caution - substance not yet tested completely

### 2.3 Other hazards

none

# Section 3 – Composition / Information on Ingredients

Name:		Di- <i>tert</i> -butyl dicarbonate	
Synonyms		Boc anhydride	
Formula		C <sub>10</sub> H <sub>18</sub> O <sub>5</sub>	
Molecular Weight		218.25 g/mol	
Classification		Flam. Liq. 3; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2;	
		Skin Sens. 1; H226, H330, H315, H319, H317	
CAS – No.	EC – No.	Index – No.	Concentration
24424-99-5	246-240-1	_	<= 100%

Name:		Celite	Celite	
Synonyms		Diatomaceous ear	Diatomaceous earth	
Formula		_	-	
Molecular Weight		_	-	
Classification		*	STOT RE 1; H372 Concentration limits: 1 - 10 %:	
		STOT RE 2, H373;	STOT RE 2, H373; > 10 %: STOT RE 1, H372	
CAS – No.	EC – No.	Index – No.	Concentration	
68855-54-9	272-489-0	_	>= 90 - <= 100 %	

Name:	Si-triethylamine
Synonyms	Triethylamine-Derivatized Silica Gel

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Formula		-	
Molecular Weight		_	
Classification		_	
CAS – No.	EC – No.	Index – No.	Concentration
_	_	_	<= 100%

Name:		Si-trisamine	
Synonyms		Tris(aminoethyl)amino-propyl-functionalised silica	
		gel	
Formula		_	
Molecular Weight		_	
Classification		_	
CAS – No.	EC – No.	Index – No.	Concentration
_	_	-	_

# **Section 4 – First Aid Measures**

#### 4.1 Inhalation

If inhaled, move affected person to fresh air. If breathing is difficult give oxygen. If breathing has stopped give artificial respiration. Seek medical attention.

### 4.2 Skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### 4.3 Eve contact

Wash thoroughly with plenty of water for at least 15 minutes, separating the eyelids with the fingers. If eye irritation persists, seek medical attention.

### 4.4 Ingestion

Do NOT induce vomiting. Wash mouth with plenty of water if person is conscious. Never give anything by mouth to an unconscious person. Consult a physician.

# **Section 5 – Fire-Fighting Measure**

### 5.1 Suitable Extinguishing media

Use alcohol - resistant foam or dry chemical extinguishers

## 5.2 Special hazards arising from the cartridge substances or mixtures

Carbon oxides.

Commbustible.

Silicon oxides.

May release toxic, corrosive and / or flammable / explosive vapors during a fire.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## **Section 6 – Accidental Release Measures**

# 6.1 Personal precautions

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In case of a damaged cartridge or leaking reagent out of the cartridge avoid breathing dust. Ventilate the area thoroughly and shut of sources of ignition. Avoid raising dust. Use protective equipment described in Section 8.

### 6.2 Environmental precautions

Do net let the materials inside the cartridge enter the drain.

### 6.3 Methods and materials for containment and cleaning up

Contain spilled cartridge material and pick up without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. For disposal see Section 13.

## Section 7- Handling and Storage

## 7.1 Precautions for safe handling

Do not try to open the reagent cartridge.

#### 7.2 Conditions for safe storage

Keep cartridge in sealed closed bag. Store below 8°C, out of direct sunlight and away from incompatible substances.

### 7.3 Specific end-usage

Use only in the application the cartridge intended for. Only use with Synple Chem synthesizer devices.

## Section 8 - Exposure Controls / Personal Protection

### 8.1 Personal protective equipment

### **Respiratory protection**

Respiratory protection is not required when materials are contained in the cartridge. When spilled see Section 6.

# **Hand protection**

Handle with gloves. The selected protective gloves have to satisfy the specifications of the EU Directive 89 / 686 / EEC and the standard EN 374 derived from it. Gloves must be inspection prior to use. Use proper glove removal technique (without touching the outer surface of the glove) to avoid skin contact with the product. Dispose of gloves after use in accordance with applicable regulations and good laboratory practice. Wash and dry hands.

### Eye protection

Safety glasses with side – shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

### Skin and body protection

Choose body protection according with good laboratory practices and to specific workplace.

### Hygiene measure

Handle in accordance with good laboratory hygiene and safe practice. Wash hands before breaks and at the end of the workday.

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# Section 9 - Physical and Chemical Properties

9.1 Appearance

Form: Plastic Reagent Cartridge

Filled with solid reagents / powder

Colour: White / Brown

9.2 Safety Data

pH No data available
Melting point No data available
Boiling point No data available
Flash point No data available
Ignition temperature Lower explosion limit Upper explosion limit No data available

Water solubility Insoluble

# Section 10 - Stability and Reactivity

## 10.1 Chemical Stability

Stable under recommended storage conditions for at least 1 year

### 10.2 Conditions to avoid

Avoid temperatures above 60°C, long exposure to air and moisture

# 10.3 Materials to avoid

Strong oxidizing agents or corrosive chemicals

# 10.4 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – monomers, carbon dioxide and / or carbon monoxide, nitrogen oxides, boron oxides, borane

# Section 11 – Toxicological Information

### 11.1 Acute Toxicity

No data available

### Other components:

No data available

### 11.2 Skin corrosion / irritation

No data available

### 11.3 Serious eye damage / eye irritation

No data available

#### 11.4 Respiratory or skin sensation

No data available

#### 11.5 Germ cell mutagenicity

No data available

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### 11.6 Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NPT or EPA classification

### 11.7 Reproductive toxicity

No data available

### 11.8 Specific target organ toxicity – single exposure

No data available

## 11.9 Specific target organ toxicity – repeated exposure

No data available

### 11.10 Aspiration hazard

No data available

#### 11.11 Additional information

#### Silica:

RTECS: VV7315000

Amorphous silica is not classifiable as to its carcinogenicity to humans (Group 3); however, crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1, IARC). Therefore, amorphous silica should be handled as if possessing the same hazards as the crystalline form., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# Section 12 - Ecological Information

### 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

No data available

# **Section 13 – Disposal Considerations**

### 13.1 Product (Reagent cartridge)

Contact a licensed professional waste disposal service to dispose of this material. Combine the cartridge with a combustible solvent and burn in a chemical incinerator quipped with an afterburner and scrubber.

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### 13.2 Contaminated packaging

In case some chemical material will exit the cartridge and contaminate the outer packaging dispose the packaging in the same way as the cartridge.

### 13.3 Un-Contaminated Packaging

Can be disposed with regular waste

# **Section 14 – Transport Information**

Not classified as dangerous goods by ADR / RID, IMDG, or IATA

# **Section 15 – Regulatory Information**

Not hazardous according to UN GHS, EU Regulation EC 1272 / 2008, or Directive 67 / 548 / EEC. Caution: This substance has not been fully tested (EC).

# 15.1 Safety, health and environmental regulations/legislation specific for the substrate or mixture No data available

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

### **Section 16 – Other Information**

This product must only be handled by, or under close supervision of those qualified in the handling and use of potentially hazardous substances. This Safety Data Sheet is offered without charge to the clients of Synple Chem and it is issued only as a guide for safe handling, use, storage, disposal and release. Information contained on this sheet is the most current available to Synple Chem at the time of preparation but does not purport to be all inclusive or a guarantee as to the properties of the product supplied. Synple Chem makes no warranties or representations as to the accuracy and completeness of the information contained herein. Synple Chem shall not be held responsible for the suitability of this information for the user's intended purposes or the consequence of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.