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Date: November 28<sup>th</sup>, 2017

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## Section 1 – Product and Company Identification

**1.1 Product name:** Synple Chem reagent cartridge Oxazepane

1.2 Product code: H002

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

#### Labeling according to Regulation (EC) No 1272/2008

### Polymer bound tin reagents

Acute toxicity, Oral (Category 3), H301 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Specific target organ toxicity - repeated exposure (Category 1), H372

Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

#### Copper(II) trifluoromethanesulfonate

Skin corrosion (Category 1B), H314

#### 2.6-Lutidine salt

Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

#### Polymer bound tin reagents

Pictogram



Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated

exposure.

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P272 Avoid release to the environment

P280 Wear protective gloves/ protective clothing

P301 + P310 IF SWALLOWED: Immediately call a poison center or doctor/

physician

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

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

rinsing.

P314 Get medical advice/ attention if you feel unwell

P501 Dispose of contents/ container to an approved waste disposal

plant.

Supplemental Hazard

Statement(s)

none

## Copper(II) trifluoromethanesulfonate

Pictogram



Signal word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing

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

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

rinsing.

Supplemental Hazard

Statement(s)

none

#### 2,6-Lutidine salt

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed. H315 Causes skin irritation.

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H319 Causes serious eye irritation.

Precautionary statement(s)

P301 + P312 + P330 IF SWALLOWED: Call poison center/ doctor if you feel unwell.

Rinse mouth.

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

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

rinsing.

Supplemental Hazard

Statement(s)

none

#### 2.3 Other hazards

A component of this product is considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

## Section 3 – Composition / Information on Ingredients

Name:		Polymer bound tin reagent	
Synonyms		_	
Formula		_	
Molecular Weight		_	
Classification		H301, H312, H315, H319, H372, H410,	
		P273, P280, P301 + P310, P305 + P351 + P338,	
		P314, P501	
CAS – No.	EC – No.	Index – No.	Concentration
_	_	_	_

Name:		Copper(II) trifluoromethanesulfonate
Synonyms		PolyCopper(II) triflate Trifluoromethanesulfonic
		acid; copper(II) salt Cupric
		trifluoromethanesulfonate
Formula		$C_2CuF_6O_6S_2$
Molecular Weight		361.68 g/mol
Classification		Skin Corr. 1B; H314
CAS – No.	EC – No.	Index – No. Concentration
34946-82-2	252-300-8	

Name:		2,6-Lutidine salt	
Synonyms		2,6-Dimethylpyridine salt	
Formula		$C_7H_9N$	
Molecular Weight		107.15 g/mol	
Classification		Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315,	
		H319	
CAS – No.	EC – No.	Index – No.	Concentration
108-48-5	203-587-3	_	_

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Name:		Silica gel	Silica gel	
Synonyms		Silica		
Formula		SiO <sub>2</sub>		
Molecular Weight		_	-	
Classification		_	_	
CAS – No.	EC – No.	Index – No.	Concentration	
112926-00-8	231-545-4	_	_	

Name:		SCX-2	
Synonyms		Propylsulfonic acid – functionalized silica gel	
Formula		_	
Molecular Weight		-	
Classification		_	
CAS – No.	EC – No.	Index – No.	Concentration
_	_	_	_

## Section 4 - First Aid Measures

#### 4.1 Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## 4.2 Skin contact

Wash with soap and water

#### 4.3 Eye 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

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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide

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

May release toxic or flammable 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

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.

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#### 6.2 Environmental precautions

Do net let the materials inside the cartridge enter the drain. Discharge into the environment must be avoided

## 6.3 Methods and materials for containment and cleaning up

Contain spilled cartridge material and pick up without creating dust. 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.

## Section 9 – Physical and Chemical Properties

#### 9.1 Appearance

Form: Plastic Reagent Cartridge

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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 No data available
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 hydrolyzing conditions (organic tin species) or fire conditions

## Section 11 – Toxicological Information

#### 11.1 Acute Toxicity

#### Lutidine:

LD50 Oral – Rat – 400 mg/kg LD 50 Dermal – Guinea pig – 2.500 mg/kg

#### 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

## 11.6 Carcinogenicity

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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

#### Polymer bound tin compounds:

RTECS: Not available

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

#### 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.

#### Copper(II) Triflate:

RTECS: Not available

Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache

#### 2,6-Lutidine:

RTECS: OK97500000

Cough, Difficulty in breathing, Gastrointestinal disturbance, Ataxia., Unconsciousness, Weakness, Diarrhoea. 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

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#### 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

Organic tin species: This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

#### 12.6 Other adverse effects

Organic tin species: Very toxic to aquatic life with long lasting effects

## 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.

#### 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

14.1 UN number

ADR/RID: 3261 IMDG: 3261 IATA: 3261

## 14.2 UN proper shipping name

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Copper(II) trifluoromethanesulphonate) IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Copper(II) trifluoromethanesulphonate) IATA: Corrosive solid, acidic, organic, n.o.s. (Copper(II) trifluoromethanesulphonate)

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

No data available

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## Section 15 – Regulatory Information

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.