SAFETY DATA SHEET

Prepared by: Benedikt Wanner
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Section 1 – Product and Company Identification

1.1 Product name: Synple Chem reagent cartridge Morpholine-2-spiro-(4-Pip)
1.2 Product code: H011
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.

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.

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	–	–

Name:		Silica gel	
Synonyms		Silica	
Formula		SiO_2	
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.

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

	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	No data available
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

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

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

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.