

SAFETY DATA SHEET

Prepared by: Benedikt Wanner
Date: October 10th, 2020
Version: 0001



Section 1 – Product and Company Identification

- 1.1 Product name:** Synple Chem reagent cartridge
1.2 Product code: Azide Formation A001
1.3 Recommended Use: Laboratory chemical consumable
1.4 Company Name: Synple Chem AG,
Kemptpark 18,
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

Classification according to Regulation (EC) No 1272/2008

Copper(II)sulfate pentahydrate

Acute toxicity, Oral (Category 4), H302
Serious eye damage (Category 1), H318
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Copper(II)sulfate pentahydrate

Pictogram



Signal word

Danger

Hazard statement(s)

H302

Harmful if swallowed.

H318

Causes serious eye damage.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273

Avoid release to the environment.

P280

Wear eye protection/ face protection.

P301 + P312 + P330

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P305 + P351 + P338 +

P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

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Supplemental Hazard Statement(s) none

2.3 Other hazards none

Section 3 – Composition / Information on Ingredients

Name:	Imidazole-1-sulfonyl azide hydrochloride		
Synonyms	–		
Formula	$C_3H_3N_5O_2S_2$		
Molecular Weight	173.15 g/mol		
Classification	–		
CAS – No.	EC – No.	Index – No.	Concentration
–	–	–	–

Name:	Copper(II)sulfate pentahydrate		
Synonyms	Copper sulphate, cupric sulphate, Blue vitriol		
Formula	$CuSO_4 \cdot 5H_2O$		
Molecular Weight	249.69 g/mol		
Classification	Acute Tox. 4; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H318, H400, H410		
CAS – No.	EC – No.	Index – No.	Concentration
7758-99-8	231-847-6	029-004-00-0	<1%

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

Name:	Potassium bicarbonate		
Synonyms	Potassium acid carbonate		
Formula	$KHCO_3$		
Molecular Weight	100.12 g/mol		
Classification	–		
CAS – No.	EC – No.	Index – No.	Concentration
298-14-6	206-059-0	–	–

Name:	Silica supported triethylamine		
Synonyms	–		
Formula	–		
Molecular Weight	–		

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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 with soap and water. Seek medical attention if irritation develops or persists

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 alcohol – resistant foam or dry chemical extinguishers

5.2 Special hazards arising from the cartridge substances or mixtures

May release toxic or flammable vapors during a fire (Sulphur oxides, Copper oxides)

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 off sources of ignition. Avoid raising dust. Use protective equipment described in Section 8.

6.2 Environmental precautions

Do not 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.

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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 inspected 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

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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

LD50 Oral - Rat - male and female - 482 mg/kg

LD50 Dermal - Rat - male and female - > 2.000 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

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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.

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).

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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.