SAFETY DATA SHEET

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Date: May 7th, 2024
Version: 0002

Section 1 – Product and Company Identification

1.1 Product name: Synple Chem reagent cartridge – Azide Formation – Aryl Amines
1.2 Product code: A002
1.3 Recommended Use: Laboratory chemical consumable
1.4 Company Name: Synple Chem AG,
Kemptpark 18,
8310 Kemptthal
Switzerland

1.5 Contact Details: Telephone: +41 (0)44 244 08 50
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.

Supplemental Hazard Statement(s): none

2.3 Other hazards

none

Section 3 – Composition / Information on Ingredients

Name:		Imidazole-1-sulfonyl azide tetrafluoroborate	
Synonyms		–	
Formula		$C_3H_3N_5O_2S_2.HBF_4$	
Molecular Weight		260.96 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		–	
Classification		–	
CAS – No.	EC – No.	Index – No.	Concentration
–	–	–	–

Name:	Celite (HM-N)

Synonyms		–	
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 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 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.

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 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

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).

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.