SAFETY DATA SHEET

Prepared by: Paula Nichols
Date: October 25th, 2019
Version: 0001

Section 1 – Product and Company Identification

1.1 Product name: Synple Chem reagent cartridge
1.2 Product code: Mitsunobu cartridge M001
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

Classification according to Regulation (EC) No 1272/2008

Harmful by inhalation
by contact with skin and by ingestion
Irritating to eyes
Irritating to respiratory tract. Do not inhale the dust

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Caution – substance not yet tested completely

Pictogram Signal word Warning Hazard statement(s) H315 Harmful by inhalation.
Precautionary statement(s) P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Pictogram

Signal word	Warning
Hazard statement(s)	
H332	Harmful if inhaled
H312	Harmful in contact with skin (dermal)
H302	Harmful if swallowed
H320	Causes eye irritation
H335	May cause respiratory irritation
Precautionary statement(s)	
P280	Wear protective gloves/ protective clothing

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Raise eyelids with fingers for a good wash. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330	IF SWALLOWED: Wash the mouth with water. Call a physician.
P302+P352	IF ON SKIN: Wash skin with soap and copious amounts of water for at least 15 minutes.
P304+P313+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If not breathing give artificial respiration. If breathing is difficult, give oxygen and call a physician.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
Supplemental Hazard Statement(s)	none

2.3 Other hazards

Slip hazard – may cause floors to become very slippery if cartridge contents are spilt.

Section 3 – Composition / Information on Ingredients

Name:		PS – PPh3 resin; PS – Triphenylphosphine resin	
Synonyms		Macroporous cross-linked polystyrene / divinylbenzene polymer functionalised with a triphenylphosphine group	
Formula		–	
Molecular Weight		–	
Classification		This product is not hazardous according to UN GHS, EU Regulation 1272 / 2008 or Directive 67 / 548 / EEC	
CAS – No.	EC – No.	Index – No.	Concentration
–	–	–	–

Name:		Di-tert-butyl azodicarboxylate	
Synonyms			
Formula		C10H18N2O4	
Molecular Weight		230,26 g/mol	
Classification		Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	
CAS – No.	EC – No.	Index – No.	Concentration
870-50-8	212-796-9	–	–

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

Name:		Trimethylammonium Carbonate-Derivatized Silica Gel	
Synonyms			
Formula		–	
Molecular Weight		–	
Classification		Harmful by inhalation by contact with skin and by ingestion Irritating to eyes Irritating to respiratory tract. Do not inhale the dust	
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
Will produce black, acrid smoke if burned. May release toxic, corrosive, and / or flammable / explosive vapors in a fire.
Carbon oxides, Nitrogen oxides (NOx).

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, vapors or mist. 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.
Caution: Slip Hazard. Floor may be slippery even when dry due to spherical beads.

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.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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
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

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
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.

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. Do not throw residues in the sewer, have this product and its recipient eliminated in a centre that specialize in dangerous or special waste disposal.

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.