



SAFETY DATA SHEET

Product Name
SCGC PVC

Product Type
PVC Resin

RY-S-QA-T003 Safety Data Sheet : PVC Resin

Effective date : 30 June 2023, Rev.10

SECTION 1 : Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

POLYVINYL CHLORIDE (PVC)

1.2 Application of substance/ the preparation:

Raw material for plastic industry

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Thai Plastic and Chemicals Public Company Limited

- **Head office address:**

1 Siam Cement Road, Bangsue, Bangkok 10800, Thailand

- **Plant address:**

8, I-1 Road, Map Ta Phut Industrial Estate, Tambon Map Ta Phut,

Amphoe Muang, Rayong 21150

Telephone: +66 38 925 200 ext. 6183

1.4 Suggestion or Complaint:

Technical Services & Development Department

Thai Polyethylene Co., Ltd

Email: pvc_resin@scg.com

1.5 Emergency telephone number:

+66 38 925 200 ext. 6183

SECTION 2 : Hazards identification

2.1 Classification according with GHS: Not classified

2.2 Health Effects:

Routes of Entry

Eye Contact, Inhalation, Skin Contact

- **Effects of Short-Term (Acute) Exposure**

- Inhalation: May cause irritation and / or discomfort to throat and lungs.
- Skin Contact: May cause skin irritation.
- Eye Contact: Solid or dust may cause irritation or scratch the surface of the eye.
- Ingestion: No effect expected.

- **Effects of Long-Term (Chronic) Exposure**

Chronic exposure to the respirable fraction (particles less than 10 microns in size) of PVC particles may produce pulmonary fibrosis. Particle sizes associated with suspension polymerization are typically greater than 10 microns in size.



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SECTION 3 : Composition/information on ingredients

Chemical Name:	Ethene, chloro-, homopolymer
IUPAC Name:	poly(1-chloroethene)
Synonym:	Polyvinyl chloride, PVC, Chloroethylene Polymer
CAS-No.:	9002-86-2
Chemical Formula:	(C ₂ H ₃ Cl) _n

Composition

Substance Name	CAS No.	% by Weight
Polyvinyl Chloride Homopolymer	9002-86-2	>99.5%

SECTION 4 : First Aid Measures

4.1 Description of first aid measures:

- Inhalation:** If dust is inhaled, remove patient from area to fresh air. If the product causes irritation or unwell breathe, a patient should use a bag-valve-mask or similar device to perform artificial respiration (rescue breathing). Consult a physician if there are symptoms. Treat the product as an inert nuisance dust.
- Skin Contact:** Wash contaminated areas with soap and water. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.
- Eye Contact:** Immediately flush eyes with water for at least 15 minutes and occasionally lifting eyelids until no chemicals remains. Do not rub the eyes. If irritation develops, seek medical attention.
- Ingestion:** No hazard expected. IF LARGE AMOUNTS ARE INGESTED, GET MEDICAL ATTENTION.

SECTION 5 : Firefighting Measures

Flash Points:	391°C
Auto-Ignition Temperature:	450°C
Suitable Extinguishing Media:	Carbon Dioxide (CO ₂) or Water

Fire Fighting Procedures:

Keep unnecessary people away, isolate hazard area and deny entry, firefighting with upwind. Move container from fire area if it can be done without risk. Wear NIOSH-approved positive self-contained breathing apparatus (SCBA) and operate in pressure demand mode.

** NIOSH: The National Institute for Occupational Safety and Health.

SECTION 6 : Accidental Release Measures

6.1 Personal Protection:

- Refer to protective measures listed in Sections 8 (Exposure Controls/ Personal Protection).

6.2 Methods for cleaning up:

- Cleaning the spilled product with vacuum or other suitable equipment to minimize dust emission. Keep in properly labeled containers. Treat recovered material as described in the Section 13 (Disposal Considerations).

SECTION 7 : Handling and Storage

7.1 Precautions for safe handling:

- Use in adequate ventilation area only to minimize generation of dust emissions. Avoid breathing or contacting with eyes and skin by wearing personal protection equipment. Wash thoroughly after handling. Good housekeeping measures should be used. Preventing accumulation of dust and eliminating potential ignition sources. Accumulations of materials should be removed from settling areas.
- Polyvinyl Chloride can acquire a substantial static electrical charge. Handling and processing equipment should have electrical grounding.

7.2 Conditions for storage:

- Store and handle in accordance with all current regulations and standards. Container tightly closed and properly labeled. Store in a cool, dry area. **Store in a well-ventilated area. Avoid heat, flames, sparks and other sources of ignition.**



Keep in dry area



Store in cool place

- Arrange product properly and correctly. For more information, please see “PVC User manual”

SECTION 8 : Exposure Controls/Personal Protection

Exposure Limits:

- OSHA – PEL (8 Hour TWA)
 - 15 mg/m³ (Total Dust)

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- 5 mg/m³ (Respirable)
- ACGIH – TLV (8 Hour TWA)
 - 10 mg/m³ (Nuisance dust)
 - 1 mg/m³ (Respirable)

Engineering Controls:

- Provide local exhaust ventilation where dust or vapors may be generated. Ensure compliance with applicable exposure limits stated above.

Personal Protection Equipment:

- Respiratory Protection:



Use NIOSH-approved respirators as needed that meet the requirements of 29 CFR 1910.134.

- Eye Protection:



Use safety goggles during handling of material.

- Skin Protection:



Minimize contact with material. Wear appropriate gloves and clothing.

- Other Protection:

Use with adequate ventilation in production area to eliminate the small amounts of Residual Vinyl Chloride Monomer (VCM) and Hydrogen Chloride gas (HCl) which occurs during process.

SECTION 9 : Physical and chemical properties

- **Physical state and appearance:** White powder
- **Odor:** Odorless
- **Flash point:** 391°C
- **Specific Gravity:** 1.4
- **Solubility:** Insoluble
- **Auto-ignition temperature:** 450°C

SECTION 10 : Stability and Reactivity

10.1 Stability:

- Stable at normal temperature and pressure.

10.2 Hazardous decomposition products:



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- Gaseous hydrogen chloride (HCl), Carbon monoxide, small amounts of benzene and aromatic and aliphatic hydrocarbons and Phosgene.

10.3 Other Information:

- Conditions to avoid
Avoid heat, flames, sparks and other sources of ignition.

SECTION 11 : Toxicological Information

11.1 Acute Toxicity:

- LC50 inhalation (mg/m3): 140 mg/m3/10M (Mouse)
- Inhalation: Mechanical irritation from the particulates generated by the product.

11.2 Chronic Toxicity:

- The available evidence from experimental animals and from humans indicates that pure PVC is not metabolized in mammals. Several studies have described pulmonary fibrosis from inhalation of high levels of respirable PVC particles. PVC resin particles generated by suspension polymerization are generally large enough in diameter that the majority are not considered respirable.

11.3 Carcinogenicity:

- This material is not classified as to its carcinogenicity to humans by International Agency for Research on Cancer (IARC).

SECTION 12 : Ecological Information

12.1 Ecotoxicity:

- The product is non-toxic to aquatic life, environment and bioaccumulation.

SECTION 13 : Disposal Considerations

13.1 Product:

- Do not dump into any sewers, on the ground, or into any body of water. Dispose of waste in a licensed landfill or by incineration in accordance with federal state and local laws and regulations. The wastes should be treated as hazardous waste.
- User should be considering in case of reuse or reprocess.

As Manufacturer, TPC does not implicate in any user's processing or disposal process. The recommendations of disposal above only for substance as mention in Section 3 (Composition or Information on Ingredients) and does not imply to any contamination or other conjugating materials

13.2 Contaminated packaging:



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- Disposal of wastes should be treated as the hazardous waste.
- Contaminated packaging must not be reuse
- Disposal must be made according to all applicable official laws and regulations.

SECTION 14 : Transport information

SHIPPING NAME:	Polyvinyl Chloride	IATA HAZARD CLASS:	Not Regulated
DOT HAZARD CLASS:	Not Regulated	IMDG CLASS:	Not Regulated
DOT SHIPPING ID:	Not Required	RID/ADR CODES:	Not Required
PACKING GROUP:	Not Required	HAZARD ID:	Not Required
LABEL:	Not Required		

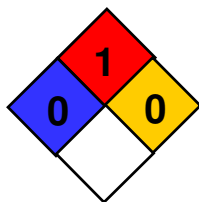
* This product is not regulated as a hazardous material by the U.S. Department of Transportation (DOT), IMDG, EU, United Nations, IATA or the Canadian Transportation of Dangerous Goods (TDG) regulations.

SECTION 15 : Regulatory information

- **OSHA 29 CFR 1910.1017:**
PVC Resin may contain trace levels of VCM (vinyl chloride monomer). Under normal working conditions with adequate ventilation, neither the OSHA's 8-hour time weighted average, PEL of 1.0 PPM, action level of 0.5 PPM, or C/STEL of 5.0 PPM should be exceeded. Refer to 29 CFR 1910.1017 if workplace monitoring determines the level exceeds the PEL, action level, or C/STEL.
- **TSCA (40 CFR 710):**
Polyvinyl Chloride is listed in The Toxic Substances Control Act Chemical Substance inventory (TSCA Inventory).
- **California Proposition 65:**
PVC resin may contain trace quantities of VCM. VCM is a chemical known to the state of California to cause cancer.

SECTION 16 : Other information

NFPA:



Health:	0
Flammability:	1
Reactivity:	0
Special Hazard Warning:	None

This Safety Datasheet is valid for all physical forms.



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Disclaimer:

- The Applications specified herein is for reference only.
- It is customer's responsibilities to inspect and test the product for suitability of the customer's own use and purpose. The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- No liability can be accepted in respect of the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party's materials.

References:

- IARC. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Geneva: World Health Organization, International Agency for Research on Cancer, 1972-PRESENT. (Multivolume work). Available at: <http://monographs.iarc.fr/index.php> p. V19 410
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