

Safety Data Sheet: SDS
POLYVINYL CHLORIDE (PVC)

Section 1: Chemical Product and Company Identification

Product name: POLYVINYL CHLORIDE (PVC)

Application of substance/
the preparation: **Raw material for plastic industry**

Company Identification: Thai Plastic and Chemicals Public Company Limited

Head Office Address: 14th Floor, Rajanakarn Bldg, 183 South Sathorn Rd, Yannawa, Sathorn,
Bangkok 10120
Telephone: (+66) 2676-6000 Telefax: (+66) 2676-6045

Suggestion or complaint call: (+66) 2676-6000

Rayong Plant: 8, I-1 Road, Map Ta Phut Industrial Estate, Tambon Map Ta Phut,
Amphoe Muang, Rayong 21150
Telephone: (+66) 3868-3900 Telefax: (+66) 3868-3392

Emergency Call: (+66) 3868-3900 # 6183, 7663

Section 2: Hazards Identification

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. Product contains residual amounts of VCM (concentrations less than 10 ppm)

Section 3: Composition or Information on Ingredients

Chemical Name: Ethene, chloro-, homopolymer
 Synonym: Polyvinyl chloride, PVC, Chloroethylene Polymer
 CAS-No.: 9002-86-2
 Chemical Formula: $(C_2H_3Cl)_n$
 Composition:

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

Section 4: First Aid Measures

Inhalation: **If dust is inhaled, remove patient from area to fresh air.** Consult a physician if there are symptoms. Treat 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.** 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: Fire Fighting Measures

Upper/Lower Flammability or Explosive Limits: Not Applicable
 Flash Points: 391°C
 Auto-Ignition Temperature: 450°C
 Suitable Extinguishing Media: Carbon Dioxide (CO₂) or Water
 Extinguishing media which are not suitable: Not Applicable

Fire Fighting Procedures:

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

Section 6: Accidental Release Measures

Personal Protection :

Refer to protective measures listed in sections 8.

Methods for cleaning up :

Pick up mechanically and arrange disposal without creating dust which using Vacuum or other suitable equipments. Keep in properly labeled containers. Treat recovered material as described in the section 13

Section 7: Handling and Storage

Handling :

- Use with adequate ventilation. Avoid contact with eyes and skin. Good housekeeping measures should be used and 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.

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 methods. For more information, please see "PVC User manual"

Incompatible Materials : None known.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

OSHA – PEL (8 Hour TWA)

· 15 mg/m³ (Total Dust)

· 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.

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 VCM and Hydrogen Chloride gas (HCl) which occurs during process.

Section 9: Physical and Chemical Properties

Physical state and appearance:	White powder
Odor:	Odorless
Odor threshold:	Not Applicable
pH:	Not Applicable
Boiling Point:	Not Applicable
Melting Point:	Not Applicable
Flash Point:	391°C
Evaporation rate:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Specific Gravity:	1.4
Solubility:	Insoluble
Auto-ignition temperature:	450°C
Molecular Weight:	Not Applicable
Additional Data:	-

Section 10: Stability and Reactivity

Stability:	Stable at normal temp and pressure.
Incompatible Materials:	None known.
Hazardous decomposition products:	Gaseous hydrogen chloride (HCl), Carbon monoxide, small amounts of benzene and aromatic and aliphatic hydrocarbons and Phosgene.
Other Information:	
Conditions to avoid:	Avoid heat, flames, sparks and other sources of ignition.

Section 11: Toxicological Information

Acute Toxicity:

LD50 oral (mg/kg):	No data available
LD50 skin (mg/kg):	No data available
LC50 inhalation (mg/m ³):	140 mg/m ³ /10M (Mouse)
Eye:	Mechanical irritation from the particulates generated by the product.
Skin:	Mechanical irritation from the particulates generated by the product.
Inhalation:	Mechanical irritation from the particulates generated by the product.

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.

Carcinogenicity:

This material is not classified as to its carcinogenicity to humans by IARC: Group 3

Section 12: Ecological Information

Ecotoxicity:

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

Section 13: Disposal Considerations

Product:

- Dispose of waste in a licensed landfill or by incineration in accordance with federal state and local regulations. The wastes should be treated as hazardous waste.
- User should be considering in case of reuse or reprocess.

As Manufacturer, TPC does not implicated in any user's processing or disposal process. The recommendation of disposal above only for substance as mention in section 3 and does not implied to any contamination or other conjugating materials.

Uncleaned packaging:

- Disposal of wastes should be treated as the hazardous waste.
- Uncleaned packaging must not be reuse.
- Disposal must be made according to official regulations.

Section 14: Transport Information

UN Number :	Not regulated
UN Class :	Not regulated
UN Packing Group :	Not regulated
Other Transport Information:	U.S.DOT 49 CFR 172.101 : Not regulated Canadian transportation of dangerous goods : Not regulated

Section 15: Regulatory Information

OSHA 29 CFR 1910.1017:

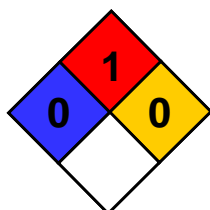
PVC Resin may contain trace levels of vinyl chloride monomer. Under normal working conditions with adequate ventilation, neither the OSHA's 8-hour time weighted average, PEL of 1.0 PPM, action level of 0.5 PPM, or C/STEL of 5.0 PPM should be exceeded. Refer to 29 CFR 1910.1017 if workplace monitoring determines the level exceeds the PEL, action level, or C/STEL.

TSCA (40 CFR 710):

Polyvinyl Chloride is listed in the 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:	Non

Disclaimer :

- This product can be used only for the application as specified hereabove.
- 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 accuracy and completeness of such information.
- We make no other warranties which extend beyond the description contained herein. Nothing herein shall be interpreted to constitute, create or cause any implied warranty of merchantability or fitness for a particular purpose.
- It is the customer's responsibility to inspect and test in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer shall be responsible for the appropriate, safe and legal use, processing and handling of our products.