

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

### 1.1 Product identifier

Product Name : PG620 (62GP), PG680 (68GP), PG740 (74GP),  
PG770 (77GP), PS670 (67SF), PC750 (75HC),  
PC680 (68HC), PS671, PS680  
SE102, SE201, PM990  
Chemical Name : Ethene, Chloro-, Homopolymer  
Synonyms : Polyvinyl chloride (PVC)

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Industrial raw material for plastics processing

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

TPC Paste Resin Co., Ltd.

16, I-1 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Muang, Rayong, 21150, Thailand

Telephone: +66 3892 5200 Fax: +66 3892 5299

#### General Information or complaint

Technical Service & Development Department

SCG Performance Chemicals Co., Ltd.

1 Siam Cement Road, Bangsue, Bangkok, 10800, Thailand

Telephone : +66 2586 2073 Fax : +66 2586 3676

### 1.4 Emergency telephone number:

Telephone: +66 3892 5200

## SECTION 2: Hazards identification

### HMIS® rating (product as packaged)

\*HMIS is The Hazardous Materials Identification System

Health: 0 Fire: 1 Reactivity: 0

### POTENTIAL HEALTH EFFECTS:

#### Inhalation

Inhalation of dust and vaporization of toxic vapor such as ammonia and residue vinyl chloride monomer (RVCM) may cause irritating to the respiratory tract and breathless. Prolonged inhalation exceeding threshold limit values (TLV) can lead to damaging effect as a result of mechanical overloading of the respiratory tract. RVCM will be decreased by time. (Refer to Section 8 for Exposure Control Information)

#### Skin contact

Dust may cause irritation to the skin.

#### Eyes contact

Dust may cause irritation to the eyes.

#### Ingestion

Not an ordinary cause of exposure. This material is not hazardous under United States Occupational Safety and Health Administrative (OSHA) criteria and Workplace Hazardous Materials Information System (WHMIS) criteria.

## SECTION 3: Composition/information on ingredients

Component	CAS number	% by Weight
Ethene, chloro-, homopolymer (PolyVinyl Chloride)	9002-86-2	100

## SECTION 4: First Aid Measures

### Inhalation

Remove a patient to fresh air immediately. If the product causes irritant or unwell breathe, a patient should use a bag-valve-mask or similar device to perform artificial respiration (rescue breathing). Get medical attention immediately.

### Skin contact

Immediately flush skin with mild soap and large amounts of water until no chemicals remains, Get medical attention

### Eye contact

Wash eyes immediately with large amount of water or optic eye lotion, occasionally lifting eyelids until no chemicals remains. Get medical attention if irritation remains.

### Ingestion

No effect expected. If large amounts are ingested, get medical attention immediately.

## SECTION 5: Firefighting Measures

### Extinguishing Media

Dry chemical, carbon dioxide, water, foam

### Fire Fighting

Keep unauthorized personnel away, isolate hazard area and deny entry, firefighting with upwind. Wear self-contained breathing apparatus (SCBA) and Personal Protective Equipment (PPE) for firefighters refers to Firefighter Boots, Firefighter Gloves, Firefighters helmets and Fire Resistant cloth.

**Hazardous Combustion Products:** Hydrogen chloride, Oxides of carbon

## SECTION 6: Accidental Release Measures

### Personal precautions

Evacuate unnecessary personnel and eliminate all sources of ignition.

### Personal protection equipment

Wear personal protection equipment follow by section 8 (Exposure controls / personal protection)

### Environmental precautions

Contain spilled chemicals with dike to prevent entry into sewers or waterways.

### Method and equipment for cleaning up

Cleaning spilled Polyvinyl chloride with vacuum to minimize dust emission. Collect spilled materials in appropriate container and identify for disposal.

## SECTION 7: Handling and Storage

### Handling Procedure:

- Use only in adequate ventilation area and to minimize generation of dust emissions. Preventing accumulation of dust and eliminating potential ignition sources.
- Avoid breathing, contact to skin and eyes by wear personal protection equipment. Wash thorough after handling.
- At temperature higher than 100 deg. Celsius may cause thermal degradation of PVC and forming hydrogen chloride and oxides of carbon. Therefore, using materials at temperature higher than 100 deg. Celsius should also use heat stabilizer.
- Recommend to use the product within 1 year, start from manufacturing date on package, to prevent the coagulation and any changing.
- Additional information can be requested in case of use beyond recommended application, recycle material, or lack of knowledge on proper disposal.
- Recommend to use the operating temperature in controlled range to prevent the resin burn or vaporization of hydrochloric acid, carbon dioxide or other toxic substances. The operating temperature and controlled range depend on actual processing condition; machine type, raw materials, formulation, mold design, production speed, etc. Recommended to use as appropriate, regarding the factors above or contact SCG staff to request the additional information.

### Sensitivity to static electricity:

- Electrostatic charges may occur. Grounding system is recommended for processing equipment.

### Storage Condition:

- Store in a cool, dry area. Keep away from heat, sparks, flames and other ignition sources. Store in adequate ventilation area. For product arrangement and storage, please study PVC Paste Resin User Manual.
- Regularly clean the working area to prevent the accumulation of dust which can cause the fire and explosion.

## SECTION 8: Exposure Controls/Personal Protection

### Occupational Exposure Limits:

Component	CAS number	United States OSHA Final PEL 8 hour TWA	China OELs	ACGIH:TLV (8 hour TWA)
Ethene, chloro ,homopolymer (PolyVinyl Chloride)	9002-86-2	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)	5 mg/m <sup>3</sup> (TWA) 10 mg/m <sup>3</sup> (STEL)	10 mg/m <sup>3</sup> (nuisance Dust) 1 mg/m <sup>3</sup> (respirable dust)

OEL : Occupational Exposure Level;  
 TLV : Threshold Limit Values;  
 TWA : Time Weighted Average;  
 STEL : Short Term Exposure Level;  
 PEL : Permissible Exposure Level;  
 OSHA : United States Occupational Safety and Health Administration;  
 ACGIH : American Conference of Governmental Industrial Hygienists

**Engineering controls:**

General room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants below occupational exposure limits

**Personal protection equipment:****Respiratory protection:**

Wear respirator with high efficiency dust, mist, fume and vapor filters.

**Eye protection:**

Wear safety glasses or goggles to protect eyes.

**Skin and body protection:**

Wear suitable protective clothing to minimize skin contact.

**Hand Protection:**

Wear appropriate chemical resistant gloves.

**Other:**

Emergency shower and eyewash facility should be in workplace close proximity.

## SECTION 9: Physical and chemical properties

<b>Physical state</b>	: Fine powder, White solid
<b>Change in appearance</b>	: Changes color on exposure to heat or light
<b>Odor</b>	: Odorless
<b>pH in demineral water</b>	: 4-7
<b>Melting point/freezing point</b>	: No data available
<b>Boiling point</b>	: Not applicable
<b>Flash point</b>	: 736 deg.F or 391deg.C
<b>Evaporation rate</b>	: Not applicable
<b>Flammability</b>	: Not applicable (Product resists ignition and does not promote flame spread)
<b>Explosive limits</b>	: Not applicable
<b>Vapor pressure</b>	: Not applicable
<b>Vapor density</b>	: Not applicable
<b>Specific gravity</b>	: 1.4
<b>Water Solubility</b>	: Insoluble
<b>Partition Coefficient (octanol/water):</b>	No data available
<b>Auto ignition temperature</b>	: 849 deg.F or 454 deg.C
<b>Decomposition temperature</b>	: >100 deg.C
<b>Viscosity</b>	: Not applicable
<b>Molecular Formula</b>	: (C <sub>2</sub> H <sub>3</sub> Cl) <sub>n</sub>
<b>Bulk Density</b>	: 0.25-0.40 g/cm <sup>3</sup>

## SECTION 10: Stability and Reactivity

### Reactivity/Stability:

Stable under standard ambient temperature and pressure (SATP) as a temperature of 298.15 K (25 °C, 77 °F) and an absolute pressure of exactly 1 atm (101,325 Pa, 1.01325 bar).

### Condition to avoid:

Avoid heat, flame, sparks and other sources of ignition.

### Incompatibilities/ Materials to Avoid:

Oxidizing materials

### Hazardous decomposition products:

Polyvinyl chloride in processing may result the release of very low levels of vinyl chloride, hydrogen chloride and oxides of carbon.

### Hazardous Polymerization:

Not hazardous. Polyvinyl chloride is a stable polymer and will not further polymerize and/or re-polymerize to form vinyl chloride monomer.

## SECTION 11: Toxicological Information

### Animal Toxicity:

Rats and guinea pigs exposed continuously to PVC dust for 24 hours/day for periods varying from 2 – 7 months were found to have extensive lung damage. In rats, inhalation of fumes from heating process to PVC produced interstitial edema as well as focal bronchial and intra-alveolar hemorrhage. No data is available on the reproductive and mutagenicity effects.

### Acute Toxicity:

PVC is practically non-toxic material by ingestion. This material is unlikely to cause skin irritation like other chemicals but physical irritation may occur. Eye irritation may occur from touching of lodged PVC particles. Existing level of Vinyl chloride is not likely to cause an acute biological effect when used in adequate ventilation areas.

### Chronic Toxicity:

The available evidence from experimental animals indicates that PVC is not effecting the metabolism in mammals. Existing level of vinyl chloride is not likely to cause a chronic biological effect when used in adequate ventilation areas.

### Carcinogenicity:

This product is not classified as a carcinogen by National Toxicology Program (NTP), International Agency for Research on Cancer (IARC) and Occupational Safety and Health Administration (OSHA)

## SECTION 12: Ecological Information

### Environmental Fate:

**Aquatic** : No data available

**Biodegradation** : PVC will not biodegrade.

**Bioaccumulation** : PVC will not bioaccumulate.

**Additional Ecological Information:** From the fact that PVC is a practically non-toxic to terrestrial organisms.

## SECTION 13: Disposal Considerations

### Waste Management Information:

Do not dump into any sewers, on the ground, or into any body of water. Any disposal of all waste and contaminate equipment and packaging should be in accordance with all applicable federal and local health and environmental laws and regulations.

## SECTION 14: Transport information

**UN number** : No listed

**Proper Shipping Name** : Polyvinyl Chloride

**Maritime Transport IMO/IMDG** : Not regulated

**Air Transport ICAO-TI and IATA-DGR** : Not regulated

**Land Transport ADR/RID** : Not regulated

**Inland Waterway Transportation ADN/ADNR:** Not regulated

IMO : International Maritime Organization

IMDG : International Maritime Dangerous Goods Code

ICAO-TI : International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IATA-DGR: International Air Transport Association - Dangerous Goods Regulations

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

RID : Regulation concerning the International Carriage of Dangerous Goods by Rail

ADN : Accord du transport Dangereux par voie Navigable  
(European accord for the transport of dangerous good by inland waterways)

ADNR : Accord du transport Dangereux par voie Navigable pour Rhin  
(European accord for the transport of dangerous good on inland waterways: Rhine)

## SECTION 15: Regulatory information

### Label:

This product is not subjected to classification according to Directive 67/548/EEC (Dangerous Substances Directive) by Council of the European Union.

### International Regulation Status:

#### U.S. REGULATIONS:

CERCLA SECTIONS 102a / 103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Vinyl chloride: 1 LBS RQ

SARA TITLE II SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40CFR 355.30): Not Regulated

SARA TITLE II SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40CFR 370.21):

Acute : no

Chronic : Yes

Fire : no

Reactive: no

Sudden release: no

SARA TITLE II SECTION 313 (40 CFR 372.65) : Not Regulated

OSHA PROCESS SAFETY (29 CFR 1910.119) : Not Regulated

OTHER U.S. REGULATIONS: 29 CFR 1910.1017 (VINYL CHLORIDE)

**International Inventory Status:**

**Canada Chemical Inventory:**

Component	DSL	NDSL
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed	Not Listed
Vinyl chloride	Listed	Not Listed

**U.S. Chemical Inventory:**

Component	TSCA
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

**EU Chemical Inventory:**

Component	EINECS	NLP	PBT
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Not Listed	Not Listed	Not Listed
Vinyl chloride	Listed	Not Listed	Not Listed

**China Chemical Inventory:**

Component	IECSC
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

### Taiwan Chemical Inventory:

Component	NECI
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

### Philippines Chemical Inventory:

Component	PICCS
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

### Australia Chemical Inventory:

Component	AICS
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

### New Zealand Chemical Inventory:

Component	NZIOC
Ethene, chloro-,homopolymer (PolyVinyl Chloride)	Listed
Vinyl chloride	Listed

### STATE REGULATIONS:

**California proposition 65:** Known to the state of California to cause the following Vinyl Chloride Cancer

(Feb. 27, 1987)



## SECTION 16: Other information

NFPA :



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

**Prepared by** : Technical Services & Development Department  
SCG Performance Chemicals Co., Ltd.

For additional data or **Product Complaint please contact:**

Technical Service & Development Department (SCG Performance Chemicals Co., Ltd.)

Telephone : +66 2586 2073 or +66 3892 5200 Fax : +66 2586 3676

### Abbreviation word:

CAS number : Chemical Abstracts Service Registry Number  
 IMO : International Maritime Organization  
 IMDG : International Maritime Dangerous Goods  
 ICAO-TI: International Civil Aviation Organization-Technical Instructions for the Safe Transport of Dangerous Goods by Air  
 IATA-DGR : IATA's Dangerous Goods Regulations  
 ADR/RID : ADR= Agreement on Dangerous Goods by Road /  
 RID = Regulations concerning The Transport of Dangerous Goods by Rail  
 AND/ADNR : Inland waterways transport of dangerous goods  
 DSL / NDSL : Domestic/Non-Domestic Substances List  
 TSCA : Toxic Substances Control Act  
 EINECS : European Inventory of Existing Commercial Chemical Substances  
 NLP : No-longer Polymers  
 PBT : Persistent Bioaccumulative and toxic  
 IECS : China Existing Chemical Inventory  
 NECI : National Existing Chemical Inventory in Taiwan  
 PICCS : Philippine Inventory of Chemicals and Chemical Substances  
 AICS : Australian Inventory of Chemical Substances  
 NZIOC : New Zealand Inventory of Chemicals

### IMPORTANT:

1. These products must be used for specific purpose stated herein only.
2. To the best of our knowledge as of the effective date stated above, the information present herein is accurate and reliable.
3. We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for particular or specific purpose.
4. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the product for the customer particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling or our products in compliance with applicable regulations and laws.

**End of Safety Data Sheet**