



Formosa Plastics Corporation, U.S.A.  
**Material Safety Data Sheet**

**1. PRODUCT IDENTIFICATION**

**Product Name:** Formolon® Suspension PVC Copolymer  
**Synonyms:** Polyvinyl Chloride/Vinyl Acetate Suspension Copolymer  
**Manufacturer:** Formosa Plastics Corp., Texas  
201 Formosa Drive  
Point Comfort, TX 77978  
**Telephone:** +1 (361) 987-7000  
**Fax:** +1 (361) 987-2363  
**E-Mail:** MSDS@fpcusa.com  
**Emergency Contact:** CHEMTREC (24 hrs) at +1 (800) 424-9300 (United States, Canada, Puerto Rico, Virgin Islands) or +1 (202) 483-7616 (Other Countries)  
**Product Code:** F-113, F-165, F-168, F-172, F-186  
**Product Use:** Vinyl flooring, Rigid calendered sheet  
**Physical Description:** White powder.  
**Formula:** (C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>C<sub>2</sub>H<sub>3</sub>Cl)<sub>n</sub>

**2. HAZARD IDENTIFICATION**

**Emergency Overview:**  
**WARNING!**

- Causes eye irritation.
- Causes skin irritation.
- May cause respiratory irritation.
- Dust may form an explosive atmosphere when dispersed in air.



**3. PRODUCT INGREDIENTS**

| Components  | Percent (%) |
|---|-------------|
| <b>Polyvinyl Chloride/Vinyl Acetate Copolymer</b>                             | 97.5 – 99.5 |
| CAS Number: 9003-22-9   |             |
| GHS Classification: Eye Irrit. 2B, Skin Irrit. 2, STOT-SE 3; H320, H315, H335 |             |
| <b>Surfactants</b>  | 0.5 – 2.5   |
| CAS Number: Mixture   |             |
| GHS Classification: Eye Irrit. 2B, Skin Irrit. 2, STOT-SE 3; H320, H315, H335 |             |



**4. FIRST AID MEASURES**

**Eye Contact:** In case of accidental contact, immediately flush eyes with water. Hold eyelids open to ensure adequate flushing. Get medical attention.

**Skin Contact:** Wash affected skin area with soap and water. Get medical attention if irritation or other symptoms develop.

**Inhalation:** Remove to fresh air. Get medical attention if irritation or other symptoms develop.

**Ingestion:** If ingested dilute swallowed material by drinking water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**Other Instructions:** Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

**5. FIRE-FIGHTING MEASURES**

**Flash Point:** Not applicable.

**Kst Value:** No data available.

**Max. Rate of Pressure Rise:** No data available.

**Min. Ignition Energy:** No data available.

**Min. Ignition Temperature:** No data available.

**Min. Explosible Concentration:** No data available.

**Dust Combustibility Rating:** No data available.

**Extinguishing Media:** Dry chemical, foam, water or carbon dioxide.

**Special Fire Fighting Procedure:** In the event of a fire, wear a NIOSH (US) or CEN (EU) approved, positive pressure, self-contained breathing apparatus (SCBA) and full protective clothing. Evacuate all non-essential personnel from the danger area.

**Unusual Fire & Explosion Hazards:** Dust may form an explosive atmosphere when dispersed in air.

**Hazardous Combustion Products:** When forced to burn, the major gaseous products of the combustion of PVC resin are carbon monoxide, carbon dioxide and hydrogen chloride.



**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Restrict access to keep out unauthorized or unprotected personnel. Wear appropriate personal protective equipment during all clean-up activities. Avoid inhalation and direct contact.



**Environmental Precautions:** Keep spilled material away from heat, sparks and open flames. Ensure adequate ventilation.

**Methods for Clean-Up:** Collect spilled material using a method that minimizes dust generation (e.g., wet methods, HEPA vacuum). Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

**7. HANDLING AND STORAGE**

**Handling:** Use with adequate ventilation. Avoid dust generation. Avoid contact with eyes and skin. Accumulations of dust should be removed from settling areas.

**Storage:** Store in a cool, dry, well-ventilated area or silo away from sources of heat, flame and sparks. Ventilate enclosed storage areas before entering. Have emergency equipment for fires and spills readily available.

**8. EXPOSURE CONTROLS & PERSONAL PROTECTION**

**Eye Protection:** Wear safety glasses with side shields, goggles or face shield for protection against dust.

**Skin Protection:** Minimize contact with product. Wear gloves and/or suitable long-sleeved clothing.

**Respiratory Protection:** An industrial hygiene risk assessment is required to determine the appropriate respiratory protection. A NIOSH (US) or CEN (EU) approved half-face, air-purifying cartridge respirator may be appropriate under limited exposure conditions.

**Engineering Controls:** Use local exhaust ventilation during dust producing operations.

**Required Work/Hygiene Procedure:** Wash hands thoroughly after handling. Do not eat, drink or smoke in work area. Dusty clothing and shoes should be thoroughly cleaned before reuse. If unusual exposures are expected, an industrial hygiene review of work practices, engineering controls and personal protective equipment is recommended.

**Exposure Guidelines:**

| <b>Polyvinyl Chloride/Vinyl Acetate Copolymer</b> |  | 75 – 99.9 |
|---|--|-----------|
| OSHA PEL-TWA:                                     | 15 mg/m <sup>3</sup> (total dust), 5 mg/m <sup>3</sup> (respirable dust) |           |
| ACGIH TLV-TWA:                                    | 10 mg/m <sup>3</sup> (total dust), 1 mg/m <sup>3</sup> (respirable dust) |           |

**9. PHYSICAL / CHEMICAL PROPERTIES**

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Physical Form:</b>       | Powder                        |
| <b>Color:</b>               | White                         |
| <b>Odor:</b>                | Odorless                      |
| <b>Molecular Weight:</b>    | Ranging from 60,000 – 150,000 |
| <b>Boiling Point:</b>       | Not determined                |
| <b>Melting Point:</b>       | Not determined                |
| <b>Solubility in Water:</b> | Insoluble                     |
| <b>Specific Gravity:</b>    | 1.4 (water = 1)               |
| <b>Vapor Density:</b>       | Not determined (air = 1)      |



**Evaporation Rate:** None (*butyl acetate =1*)  
**Vapor Pressure:** Not determined  
**% Volatile:** Negligible  
**pH:** Not determined

The physical data included above are typical values and should not be construed as a specification.

### 10. STABILITY & REACTIVITY

**Stability:** Stable under recommended storage conditions.

**Conditions to Avoid:** Avoid elevated temperature above 250°C (482 °F). Keep away from strong oxidizing agents, acids and bases.

**Hazardous Decomposition:** Not expected to occur.

**Hazardous Polymerization:** Not expected to occur.

### 11. TOXICOLOGY INFORMATION

**Primary Route(s) of Exposure:** Inhalation; eye, skin contact.

**Potential Health Effects:**

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Inhalation: May irritate and cause discomfort in nose and throat. Prolonged exposure may cause adverse effects on lungs.

Ingestion: Ingestion may cause nausea, dizziness, and abdominal pain.

**Target Organ Effects:** Not determined

**Carcinogenicity:** This product contains trace amounts of vinyl chloride. Vinyl chloride is a suspect cancer agent.

**Medical Conditions Aggravated by Overexposure:** Exposure may aggravate disorders of the eyes, skin, gastrointestinal tract, and respiratory system.

#### **Toxicological Data:**

##### **PVC Resins**

Oral TDLo (Rat): 20 g/kg

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data are available on the adverse effects of this material on the environment.

### 13. DISPOSAL CONSIDERATIONS

**Disposal Method:** This product must be disposed of in accordance with Federal, state and local environmental regulations.



**Recycling/Reclamation:** Recycling or reclamation of PVC resins should be encouraged where possible.

**14. TRANSPORTATION INFORMATION**

This product is not regulated as a hazardous material/dangerous good for all forms of transportation.

**Proper Shipping Name:** Not regulated.  
**Hazard Label:** Not applicable.  
**Hazard Class:** Not regulated.  
**UN/NA Number:** Not applicable.  
**Hazard Label(s):** Not regulated.  
**Hazard Placard(s):** Not applicable.  
**Packing Group:** Not applicable.  
**EPA Reportable Quantity (RQ):** Not applicable.  
**Emergency Response Guide (ERG) Number:** Not applicable.

**15. REGULATORY INFORMATION**

**U.N. GHS Classification & Labeling Information:**

**Classification:** Eye Irritation 2B  
Skin Irritation 2  
Specific Target Organ Toxicity (STOT) -  
Single Exposure 3



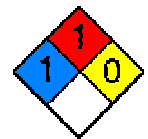
**Signal Word:** WARNING

**H Statements:** H320: Causes eye irritation.  
H315: Causes skin irritation.  
H335: May cause respiratory irritation.

**P Statements:** P307+313: If exposed, get medical attention.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P281: Use personal protective equipment as required.  
P264: Wash thoroughly after handling.  
P273: Avoid release into the environment.

**NFPA 704 Information:**

**Health Rating:** 1  
**Flammability Rating:** 1  
**Reactivity Rating:** 0  
**Other Hazards:** Not applicable



**U.S. Federal Regulatory Information:**

**EPA Clean Air Act:** Not listed  
**EPA Clean Water Act:** Not listed  
**TSCA:** The ingredients of this product are listed on TSCA inventory (40 CFR 710).



RCRA: This product does not meet the EPA criteria for ignitability, corrosivity or reactivity. The toxicity characteristic has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

CERCLA RQ: Not listed

SARA Title III § 302\*: None

SARA Title III § 311/312\*\*: None

SARA Title III § 313\*\*\*: Not listed

Container Labeling: Containers of PVC resin shall be labeled with the following statement as required by 29 CFR 1910.1017:

POLYVINYL CHLORIDE - CONTAINS VINYL CHLORIDE  
VINYL CHLORIDE IS A CANCER-SUSPECT AGENT

**U.S. State Regulatory Information:**

Texas Effects Screening Level: Short-term 50 ug/m<sup>3</sup>; Long-term 5 ug/m<sup>3</sup> (PVC)

California: Proposition 65: Warning – this product contains a chemical known to the State of California to cause cancer. (Vinyl Chloride)

New Jersey: NJ Worker & Community RTK Act (NJSA 34:5A1 et seq.) (Vinyl Chloride)

Pennsylvania: PA Worker & Community RTK Act (PA. Act 1984-1159) (Vinyl Chloride)

**European Union Dangerous Substances/Preparations Directive: Information:**

Risk Phrases: R36/37/38: Irritating to eye, respiratory system and skin

Hazard Pictogram: Xi: Irritant

Safety Phrases: S24/25: Avoid any inhalation, contact with skin and eyes.  
S36/37: Wear suitable protective clothing and gloves.  
S61: Avoid release to the environment.



**Canadian Regulatory Information:**

WHMIS Category: Class D, Division 2, Subdivision B

Ingredient Disclosure List: Not Listed

Domestic Substances List (DSL): Listed



**Other Regulatory Information:**

China: Listed on Inventory of Existing Chemical Substances in China (IECSC)

**16. OTHER INFORMATION**

**European Union Compliance:** This MSDS conforms to regulations 1907/2006/EC (REACH). This product has been classified in accordance with 67/548/EEC, 1999/45/EC, 1272/2008 (CLP) and amendments.

**Prepared By:** Formosa Plastics Corporation USA  
Corporate Environment, Safety & Communications Department

**Revision History:** First Version

**Disclaimer & Copyright Notice**

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Formosa Plastics Corporation, U.S.A. at the time it was prepared. Neither Formosa Plastics Corporation, U.S.A. nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein.



**Formosa Plastics®**

**MSDS Number:** PVC008  
**Revision Date:** 24 SEPT 2010  
**Supersedes Date:** N/A

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, Formosa Plastics Corporation, U.S.A. and its subsidiaries cannot guarantee that these are the only hazards that exist. Formosa Plastics Corporation, U.S.A. assumes no legal responsibility for loss, damage or expense arising out of, or in any way connected with, the handling, storage, use or disposal of this product.

*Copyright © Formosa Plastics Corporation, U.S.A. All rights reserved.*