Formosa Plastics Corporation, U.S.A.

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: **Formolon® Dispersion PVC Copolymer**
Synonyms: Polyvinyl Chloride/Vinyl Acetate Copolymer

Manufacturer: Formosa Plastics Corp., Delaware
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Delaware City, DE 19706
Telephone: +1 (302) 836-2200
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Point Comfort, TX 77978
+1 (361) 987-7000
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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: F40, F45
Product Use: Vinyl flooring, automotive parts & coatings
Physical Description: White powder.
Formula: $(C_4H_6O_2C_2H_3Cl)_n$

2. HAZARD IDENTIFICATION

Emergency Overview:
WARNING!

- Causes eye irritation.
- Dust may form an explosive atmosphere when dispersed in air.

3. PRODUCT INGREDIENTS

Components	Percent (%)
Polyvinyl Chloride/Vinyl Acetate Copolymer	> 95
CAS Number: 9003-22-9	
GHS Classification: Not hazardous according to GHS criteria.	
Sodium Laurel Sulfate	< 3
CAS Number: 151-21-3	
GHS Classification: Acute Tox. Oral 4, Acute Tox. Dermal 3, Eye Irritation 2, Skin Irritation 2, STOT-SE 3; H319, H315, H335, H311, H302	

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 if irritation or other symptoms

develop.

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 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: 68 bar.m/sec *

Max. Rate of Pressure Rise: 252 bar/s *

Min. Ignition Energy: >10 J (dust cloud)*

Min. Ignition Temperature: 1220 - 1256°F (660 - 680 °C) (dust cloud)*
734 – 752°F (390 - 400 °C) (dust layer)*

Min. Explosible Concentration: 180-200 g/m^3 (dust cloud)*

Dust Combustibility Rating: St 1: Weak *

* - Combustibility data represent an approximate value based on internal testing. Actual values may vary depending on the composition.

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:

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

9. PHYSICAL / CHEMICAL PROPERTIES

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

Polyvinyl Chloride Resin

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.

15. REGULATORY INFORMATION

U.N. GHS Classification & Labeling Information:

Classification:	Eye Irritation 2B
Signal Word:	WARNING
H Statements:	H320: Causes eye irritation.
P Statements:	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.

NFPA 704 Information:

Health Rating:	0
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^3; Long-term 5 ug/m^3 (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: Irritating to eyes
Hazard Pictogram:	Xi: Irritant
Safety Phrases:	S24/25: Avoid any inhalation, contact with skin and eyes. S36/37: Wear suitable protective clothing and gloves.

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: The number of this MSDS was changed from PVC06 to PVC004 on May 18, 2010.

The March 1, 2012 version of this MSDS contains revisions to the following sections:

- Section 3 – Ingredient Information

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