

Safety Data Sheet

according to 29 CFR 1910.1200 and 1907/2006/EC, Article 31

Date Printed: 07/29/2019


Version 9

Date Reviewed: 07/29/2019

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

- **Product Identifier:** Formolon® PVC Compound
 - **Product Code:** All grades.
 - **Product Use:** Resin, extrusion and compounding, plastic molding, molded articles, films and coatings.
 - **Manufacturer/Supplier:**
Formosa Plastics Corporation, Texas
201 Formosa Drive
Point Comfort, TX 77978 USA
+1 (361) 987-7000
E-Mail: MSDS@fpcusa.com
 - **European REACH Representative:** Intertek France
 - **Business Division:** Vinyl/Suspension PVC
-
- **Emergency Telephone Number:**
In case of a chemical emergency, contact CHEMTREC (24 hrs) at:
+1 (800) 424-9300 (United States, Canada, Puerto Rico, Virgin Islands)
+1 (703) 527-3887 (International & Maritime)

* Section 2: Hazards Identification

- **Hazard Classification:**
Combustible dust. May form combustible dust concentrations in air.
-  GHS08
- | | |
|-----------|---|
| Muta. 2 | H341 Suspected of causing genetic defects. |
| Carc. 1A | H350 May cause cancer. Route of Exposure: Inhalation. |
| Repr. 2 | H361 Suspected of damaging fertility or the unborn child. |
| STOT RE 2 | H373 May cause damage to organs through prolonged or repeated exposure. |



- | | |
|------------|---------------------------------|
| Eye Dam. 1 | H318 Causes serious eye damage. |
|------------|---------------------------------|



- | | |
|---------------|---|
| Skin Irrit. 2 | H315 Causes skin irritation. |
| Skin Sens. 1 | H317 May cause an allergic skin reaction. |
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **Signal Word:** DANGER

- **Precautionary Statements:**

- | | |
|------|--|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P240 | Ground/bond container and receiving equipment. |
| P261 | Avoid breathing dust. |
| P264 | Wash thoroughly after handling. |

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P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF EXPOSED OR CONCERNED: Get medical attention.
 P363 Wash contaminated clothing before reuse.

· NFPA Ratings (scale 0 - 4):



· Additional Information:

If you do not understand the hazards or safety precautions described in this data sheet, contact your supervisor or safety administrator before handling this product.

Section 3: Composition/Information on Ingredients

· Substances:

· CAS No. Description

9002-86-2 polyvinyl chloride

· Dangerous Components:

· CAS No. Description

9002-86-2 polyvinyl chloride	55-95%
471-34-1 calcium carbonate	<20%
PVC compound impact modifier	<10%
⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
13463-67-7 titanium dioxide	<12%
⚠ Carc. 2, H351	
tin heat stabilizer	<5%
⚠ Muta. 2, H341; Repr. 2, H361; STOT RE 1, H372; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1A, H317	
14808-60-7 silicon dioxide (quartz)	≥0.1%
⚠ Carc. 1A, H350	

Section 4: First Aid Measures

· **General information:** Provide symptomatic and supportive care.

· After Inhalation:

Remove victim to fresh air.
 Administer oxygen if breathing is difficult.
 Administer artificial respiration if breathing has stopped.
 Get immediate medical attention.

· After Skin Contact:

Wash affected area with soap and water.

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Get immediate medical attention.

· **After Eye Contact:**

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

· **After Swallowing:**

Administer 1-2 glasses of water to dilute ingested material.
Never give anything by mouth to an unconscious person.
Get immediate medical attention.

· **Most Important Symptoms and Effects:** No further relevant information available.

Section 5: Firefighting Measures

· **Suitable Extinguishing Agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

· **Special Firefighting Hazards:** Combustible dust. May form combustible dust concentrations in air.

· **Dust Explosivity (Kst) Rating:** St 1 - Weak to moderate explosive dust (Kst = 0-200 bar-meter/second)

· **Protective Equipment:**

In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved self-contained breathing apparatus (SCBA) and full protective clothing.

Section 6: Accidental Release Measures

· **Personal Precautions, Protective Equipment and Emergency Procedures:**

Restrict access to keep out unauthorized or unprotected personnel.
Wear appropriate personal protective equipment during all clean-up activities. See Section 8 for more information.
Avoid inhalation and direct contact.

· **Environmental Precautions:** Keep spilled material out of sewage/drainage systems and waterways.

· **Methods for Containment and Clean-Up:**

Collect spilled material using a method that controls dust generation such as a high efficiency particulate air (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.

Section 7: Handling and Storage

· **Precautions for Safe Handling:**

Avoid inhalation and direct contact.
Avoid dust formation.
Accumulations of dust should be removed from settling areas.

· **Protection Against Fires and Explosions:**

Take precautions against static discharge.
To determine required precautions, consult applicable standards such as NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (latest edition), and NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas.

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Transfer and store in properly bonded and grounded containers.

· **Conditions for Safe Storage:**

Store in closed, properly labeled containers.

Protect containers from heat, physical damage, ignition sources and incompatible materials.

Have emergency equipment for fires and spills readily available.

· **Additional Information:**

If you do not understand the hazards or safety precautions described in this data sheet, contact your supervisor or safety administrator before handling this product.

Section 8: Exposure Controls/Personal Protection

· **Occupational Exposure Limits:**

9002-86-2 polyvinyl chloride

EL (Canada) Eight-Hour Value: 1 mg/m³

TLV (USA) Eight-Hour Value: 1* mg/m³
*as respirable fraction

471-34-1 calcium carbonate

PEL (USA) Eight-Hour Value: 15* 5** mg/m³
*total dust **respirable fraction

REL (USA) Eight-Hour Value: 10* 5** mg/m³
*total dust **respirable fraction

TLV (USA) TLV withdrawn

13463-67-7 titanium dioxide

EL (Canada) Eight-Hour Value: 10* 3** mg/m³
*total dust,**respirable fraction; IARC 2B

EV (Canada) Eight-Hour Value: 10 mg/m³
total dust

PEL (USA) Eight-Hour Value: 15* mg/m³
*total dust

REL (USA) See Pocket Guide App. A

TLV (USA) Eight-Hour Value: 10 mg/m³

tin heat stabilizer

PEL (USA) Eight-Hour Value: 0.1 mg/m³

TLV (USA) Short-Term Value: 0.2 mg/m³
Eight-Hour Value: 0.1 mg/m³

14808-60-7 silicon dioxide (quartz)

BOELV (EU) Eight-Hour Value: 0.1* mg/m³
*respirable fraction

EL (Canada) Eight-Hour Value: 0.025 mg/m³
ACGIH A2; IARC 1

EV (Canada) Eight-Hour Value: 0.10* mg/m³
*respirable fraction

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- PEL (USA) Eight-Hour Value: 0.05* mg/m³
*resp. dust; 30mg/m³/%SiO₂+2
- REL (USA) Eight-Hour Value: 0.05* mg/m³
*respirable dust; See Pocket Guide App. A
- TLV (USA) Eight-Hour Value: 0.025* mg/m³
*as respirable fraction

- **Exposure Controls:** Use local exhaust ventilation during dust or mist producing operations.
- **General Protective and Hygienic Measures:**
Wash thoroughly after handling.
Avoid contact with the eyes and skin.
- **Respiratory Protection:**
An industrial hygiene risk assessment is required to determine appropriate respiratory protection.
- **Hand Protection:**



Work gloves.

- **Eye/Face Protection:**



Safety glasses with side shields.

- **Body Protection:** Protective work clothing
- **Additional Information:**
If unusual exposures are expected, an industrial hygiene review of work practices, engineering controls and personal protective equipment is recommended.

Section 9: Physical/Chemical Properties

- **Form:** Solid
- **Color:** White
- **Odor:** Odorless
- **Odor Threshold:** Not determined.
- **pH Value:** Not applicable.
- **Melting Point:** Not determined.
- **Boiling Point:** Not determined.
- **Flash Point:** Not applicable.
- **Autoignition Temperature:** Not determined.
- **Decomposition Temperature:** Not determined.
- **Lower Explosive Limit (LEL):** Not determined.

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- **Upper Explosive Limit (UEL):** Not determined.
 - **Vapor Pressure:** Not determined.
 - **Density:** Not determined.
 - **Vapor Density:** Not determined.
 - **Evaporation Rate:** Not determined.
 - **Solubility in Water:** Insoluble.
 - **Partition Coefficient (n-octanol/water):** Not determined.
 - **Viscosity:** Not determined.
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Section 10: Stability and Reactivity

- **Chemical Stability/Reactivity:** Stable if used and stored according to the specifications listed below.
 - **Conditions to Avoid:**
Combustible dust. May form combustible dust concentrations in air.
Keep away from heat, sparks and open flames.
Avoid dust formation.
 - **Possibility of Hazardous Reactions/Incompatible Materials:** No dangerous reactions known.
 - **Hazardous Decomposition Products:** No data available.
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Section 11: Toxicological Information

- **Acute Toxicity:** Based on available data, the classification criteria are not met.
- **Skin Irritation:**
Causes skin irritation.
- **Eye Irritation:**
Causes serious eye damage.
- **Respiratory Irritation:** May cause respiratory irritation.
- **Sensitization/Allergic Reaction:**
May cause an allergic skin reaction.
- **Subchronic/Chronic Toxicity:**
Suspected of causing cancer. Route of Exposure: Inhalation.
Suspected of causing genetic defects.
Suspected of damaging fertility or the unborn child.
Adverse liver effects.
Adverse kidney effects.
Adverse blood effects.
Adverse nervous system effects.
Adverse cardiovascular effects.
Adverse urinary tract effects.
- **Additional Toxicological Information:**
May cause damage to organs through prolonged or repeated exposure.

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Substances Classified by IARC (International Agency for Research on Cancer):

9002-86-2 polyvinyl chloride: 3

13463-67-7 titanium dioxide: 2B

14808-60-7 silicon dioxide (quartz): 1

Substances Classified by NTP (National Toxicology Program):

14808-60-7 silicon dioxide (quartz): K

Section 12: Ecological Information

- **Aquatic Toxicity:** Harmful to aquatic life with long lasting effects.
 - **Persistence and Degradability:** No data available.
 - **Bioaccumulative Potential:** No data available.
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Section 13: Disposal Considerations

- **Disposal Instructions:**
Dispose of waste in accordance with applicable laws and regulations.
Maximize product recovery for reuse or recycling.
-

Section 14: Transport Information

- **UN Number:**
 - **DOT, ADR, ADN, IMDG, IATA** Not Applicable

 - **UN Proper Shipping Name:**
 - **DOT, ADR, ADN, IMDG, IATA** Not Applicable

 - **Transport Hazard Class(es):**
 - **DOT, ADR, ADN, IMDG, IATA**
 - **Class:** Not Applicable

 - **Packing Group:**
 - **DOT, ADR, IMDG, IATA** Not Applicable

 - **Environmental Hazards:** Not applicable.

 - **Additional Information:**
 - **DOT:**
 - **Remarks:** This product is not regulated as a hazardous material/dangerous good for transportation.
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Section 15: Regulatory Information

· U.S. Superfund Amendments & Reauthorization Act (SARA) 355 (Extremely Hazardous Substances):

None of the ingredients are listed.

· U.S. Superfund Amendments & Reauthorization Act (SARA) 313 (Specific Toxic Chemical Listings):

None of the ingredients is listed.

· U.S. Toxic Substances Control Act (TSCA):

9002-86-2 polyvinyl chloride

471-34-1 calcium carbonate

PVC compound impact modifier

13463-67-7 titanium dioxide

PVC compound processing aid

tin heat stabilizer

14808-60-7 silicon dioxide (quartz)

· California Proposition 65 Carcinogens:

PVC resin contains minor amounts (< 1 ppm on average; 0.0001%) of residual vinyl chloride monomer. Vinyl chloride is listed as a carcinogen under Proposition 65.

13463-67-7 titanium dioxide

14808-60-7 silicon dioxide (quartz)

· ACGIH (American Conference of Governmental Industrial Hygienists) Carcinogens:

9002-86-2 polyvinyl chloride: A4

13463-67-7 titanium dioxide: A4

14808-60-7 silicon dioxide (quartz): A2

· U.S. NIOSH (National Institute for Occupational Safety and Health) Carcinogens:

13463-67-7 titanium dioxide

14808-60-7 silicon dioxide (quartz)

· Canadian Domestic Substances List (DSL):

9002-86-2 polyvinyl chloride

471-34-1 calcium carbonate

13463-67-7 titanium dioxide

tin heat stabilizer

14808-60-7 silicon dioxide (quartz)

· Canadian Ingredient Disclosure List (limit 0.1%)

None of the ingredients are listed.

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Canadian Ingredient Disclosure List (limit 1%):

None of the ingredients are listed.

Container Labeling:

The product is classified and labeled according to the CLP regulation.

Hazard Pictograms:

GHS05 GHS07 GHS08

Signal Word: DANGER
Hazard Statements:

Combustible dust. May form combustible dust concentrations in air.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.
 H350 May cause cancer. Route of Exposure: Inhalation.
 H361 Suspected of damaging fertility or the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P240	Ground/bond container and receiving equipment.
P261	Avoid breathing dust.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF EXPOSED OR CONCERNED: Get medical attention.
P363	Wash contaminated clothing before reuse.

Directive 2012/18/EU Major Accident Hazards Involving Dangerous Substances:

Annex 1 Named Dangerous Substances: None of the ingredients are listed.

Section 16: Other Information

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. Formosa Plastics Corporation, U.S.A. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. 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.

Department Issuing Safety Data Sheet: Corporate Environment, Health & Safety

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Sources & References:

This Safety Data Sheet conforms to regulation 1907/2006/EC (REACH). This product has been classified in accordance with European CLP regulations (1272/2008/EC) and the U.S. Hazard Communication standard (29 CFR 1910.1200).

* - Indicates that data has been updated from the previous version.

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