

Safety Data Sheet

according to 1907/2006/EC, Article 31

Date Printed: 03/03/2017

Version 5

Date Reviewed: 03/02/2017

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

- **Product Identifier: Formolon® PVC Compound (Pipe Grades)**
 - **Product Code:** AB--, AG--, AM-- 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
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- **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:**



GHS08

Carc. 2 H351 Suspected of causing cancer. Route of Exposure: Inhalation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Other Hazards:** Combustible dust. Suspended airborne dust may form explosive mixtures with air.
- **Signal Word:** WARNING
- **Precautionary Statements:**
P261 Avoid breathing dust.
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.
P363 Wash contaminated clothing before reuse.
P308+P313 If exposed or concerned: Get medical attention.
P501 Dispose of contents/container in accordance with local regulations.

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· **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

· **Dangerous Components:**

· **CAS No. Description**

9002-86-2 polyvinyl chloride	60-75%
471-34-1 calcium carbonate	10-20%
acrylic polymer impact modifier	5-10%
⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
acrylic polymer processing aid	1-5%
⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
13463-67-7 titanium dioxide	0.1-1%
⚠ Carc. 2, H351	
PVC heat stabilizer 696	0.1-1%
⚠ STOT RE 2, H373; ⚠ Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317; STOT SE 3, H335	

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 medical attention.

· **After Skin Contact:**

Wash affected area with soap and water.
Get medical assistance if irritation or other symptoms develop.

· **After Eye Contact:**

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

· **After Swallowing:**

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

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Get medical attention.

- **Most Important Symptoms and Effects:** No further relevant information available.
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Section 5: Firefighting Measures

- **Suitable Extinguishing Agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
 - **Special Firefighting Hazards:**
Combustible dust. Suspended airborne dust may form explosive mixtures with 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.
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Section 6: Accidental Release Measures

- **Personal Precautions, Protective Equipment and Emergency Procedures:**
Avoid dust formation.
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.
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Section 7: Handling and Storage

- **Precautions for Safe Handling:**
Avoid inhalation and direct contact.
Avoid dust formation.
 - **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.
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Section 8: Exposure Controls/Personal Protection

• **Occupational Exposure Limits:**

9002-86-2 polyvinyl chloride

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

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

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

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
withdrawn from NIC

Organotin Heat Stabilizer

PEL (USA) Eight-Hour Value: 0.1 mg/m³
PEL for Tin Compounds; Skin Hazard

TLV (USA) Short-Term Value: 0.2 mg/m³
Eight-Hour Value: 0.1 mg/m³
TLV for Tin Compounds; Skin Hazard

- **Exposure Controls:** Use local exhaust ventilation during dust or mist producing operations.
- **General Protective and Hygienic Measures:** Wash thoroughly after handling.
- **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

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- **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:** Powder
 - **Color:** White
 - **Odor:** Characteristic
 - **Odor Threshold:** Not determined.
 - **pH Value:** Not applicable.
 - **Melting Point:** Not determined.
 - **Boiling Point:** Not determined.
 - **Flash Point:** Not applicable.
 - **Autoignition Temperature:** Not determined.
 - **Lower Explosive Limit (LEL):** Not determined.
 - **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.
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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:** Keep away from heat, sparks and open flames.
 - **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.
 - May cause an allergic skin reaction.
 - Causes skin irritation.

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- **Eye Irritation:**
Causes eye irritation.
Causes serious eye irritation.
 - **Respiratory Irritation:** May cause respiratory irritation.
 - **Sensitization/Allergic Reaction:**
May cause an allergic skin reaction.
May cause an allergic skin reaction.
 - **Subchronic/Chronic Toxicity:**
Suspected of causing cancer. Route of Exposure: Inhalation.
Adverse eye effects.
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.
 - **Substances Classified by IARC (International Agency for Research on Cancer):**
9002-86-2 polyvinyl chloride: 3

13463-67-7 titanium dioxide: 2B
-

Section 12: Ecological Information

- **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.
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Section 14: Transport Information

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

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

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

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

 - **Environmental Hazards:** Not applicable.

 - **Additional Information:** This material is not hazardous 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):**
All ingredients are listed.
- **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.
75-01-4 vinyl chloride

13463-67-7 titanium dioxide
- **ACGIH (American Conference of Governmental Industrial Hygienists) Carcinogens:**
9002-86-2 polyvinyl chloride: A4

13463-67-7 titanium dioxide: A4
- **U.S. NIOSH (National Institute for Occupational Safety and Health) Carcinogens:**
13463-67-7 titanium dioxide
- **Canadian Domestic Substances List (DSL):**
9002-86-2 polyvinyl chloride

471-34-1 calcium carbonate

13463-67-7 titanium dioxide
- **Canadian Ingredient Disclosure List (limit 0.1%)**
None of the ingredients are listed.
- **Canadian Ingredient Disclosure List (limit 1%):**
None of the ingredients are listed.

- **Container Labeling According to Regulation (EC) No 1272/2008:**
The product is classified and labeled according to the CLP regulation.

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Hazard Pictograms:


GHS07 GHS08

Signal Word: WARNING

Hazard Statements:

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer. Route of Exposure: Inhalation.
 H373 May cause damage to organs through prolonged or repeated exposure.

Other Hazards: Combustible dust. Suspended airborne dust may form explosive mixtures with air.

Precautionary Statements:

P261 Avoid breathing dust.
 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.
 P363 Wash contaminated clothing before reuse.
 P308+P313 If exposed or concerned: Get medical attention.
 P501 Dispose of contents/container in accordance with local regulations.

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

Abbreviations & Acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labeling of Chemicals
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 NIOSH: National Institute for Occupational Safety
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Carc. 2: Carcinogenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· 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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