# Sheet Molding Compound Safety Data Sheet

**According to Federal Register / Vol.77, No.58 / March 26, 2012 / Rules and Regulations**

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

### 1.1 Product Identifier

Product Form : Sheet Molding Compound

**Van Wert Product Grades** : **922**

### 1.2 Relevant Identified Uses of the Substance or Mixture

Use : Mold Fiberglass Reinforced Plastics Parts

### 1.3 Details of the Supplier of the Safety data Sheet

Continental Structural Plastics
255 Rex Boulevard
Auburn Hills, MI 48326
Telephone : (248) 823-5664 or (248) 237-7800

### 1.4 Emergency Telephone Number

Emergency Number : 24 Hour Contact CHEMTREC 1-800-424-9300

## SECTION 2 : Hazards Identification

### 2.1 Classification of the Substance or Mixture

**GHS - US Classification :**

Skin Irritant 2 - H315
Eye Irritant 2A - H319
Carcinogen 2 - H351

### 2.2 Label Elements

**GHS - US Labelling :**

Hazard Pictograms (GHS-US) :



GHS08



GHS07

Signal Word (GHS-US) : Warning

Hazard Statement (GHS-US) :
H315 - May cause skin irritation.
H319 - May cause serious eye irritation.
H351 - Suspected of causing cancer.

Precautionary Statements (GHS-US) :
P201 - Obtain special instructions before use.
P201 - Do not handle until all safety precautions have been read.
P264 - Wash hands and face thoroughly after handling.
P280 - Wear protective gloves and eye protection.
P302+P352 - If on skin : wash with soap and water.
P305+P351+P338 - If in eyes : rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.
P308+P313 - If exposed or concerned : get medical advice / attention.
P332+P313 - If skin irritation occurs : get medical advice / attention.
P337+P313 - If eye irritation persists : get medical advice / attention.
P501 - Dispose of contents in compliance with federal, state and local regulations.

### 2.3 Other Hazards

No Additional Information Available.

## SECTION 3 : Composition / Information on Ingredients

### 3.1 Substances

Not Applicable

### 3.2 Components of Sheet Molding Compound

| Ingredient Name | Product Identifier | % | GHS-US Classification |
|---|---|---|---|
| Fiberglass ( Fibrous Glass ) | (CAS No.) 65997-17-3 | 33 - 41% | Not Classified |
| Styrene | (CAS No.) 100-42-5 | 13 - 19% | Flammable Liquid 3 - H226<br>Acute Tox. 4 (Inhalation) - H332<br>Skin Irritation 2 - H315<br>Eye Irritation 2A - H319 |
| Hydrated Alumina | (CAS No. 21645-51-2 | 5 - 11% | Not Classified |
| Zinc Stearate | (CAS No.) 557-05-1 | 1.3 - 2.3% | Not Classified |
| Kaolin (Clay) | (CAS No.) 1332-58-7 | 5 - 11% | Not Classified |

## SECTION 4 : First-Aid Measures

### 4.1 Description of First-Aid Measures

First-Aid Measures in General : Never give anything by mouth to an unconscious person, if you feel unwell, seek medical advice.

First-Aid Measures after Inhalation : Assure fresh air breathing. Allow the person to rest.

First-Aid Measures after Skin Contact : Do not rub affected area. wash with plenty of soap and water. If skin irritation occurs : get medical advice / attention.

First-Aid Measures after Eye Contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Direct contact with eyes is likely irritating.

First-Aid Measures after Ingestion : Rinse mouth. DO NOT induce vomiting. Seek emergency medical attention.

### 4.2 Most Important Symptoms and Effects, both Acute and Delayed

Symptoms / Injuries : None other than listed in sections below.

Symptoms / Injuries after Inhalation : Shortness of breath.

Symptoms / Injuries after Skin Contact : Causes skin irritation.

### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

No Additional Information Available

## SECTION 5 : Firefighting Measures

### 5.1 Extinguishing Media

Suitable Extinguishing Media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable Extinguishing Media : Do not use a heavy water stream.

### 5.2 Special Hazards Arising from the Substance or Mixture

Fire Hazard : Contains flammable liquid as an ingredient in compounding form.

Explosion Hazard : May form flammable / explosive vapor-air mixture. Heat may build pressure. May be explosive in certain conditions. Explosion risk in case of fire.

### 5.3 Advice for Firefighters

Firefighting Instructions : Use water spray or fog for cooling containers. Exercise caution when fighting any chemical fire. Avoid firefighting water to enter environment. In case of fire : evacuate area. Fight fire remotely due to the risk of explosion. DO NOT fight fire when fire reaches explosives. Evacuate area.

Precaution during Firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6 : Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General Measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking. Eliminate every possible source of ignition. Isolate from fire without unnecessary risk, if possible.

### 6.1.1 For Non-emergency Personnel

Emergency Procedures : Evacuate unnecessary personnel.

### 6.1.2 For Emergency Responders

Protective Equipment : Equipment clean-up crew with proper protection.

Emergency Procedures : Ventilate area.

### 6.2 Environmental Precautions

Precautionary Actions : Prevent entry to sewers and public waters. Notify authorities if material enters sewers or public waters.

### 6.3 Methods and Material for Containment and Clean-up.

Methods for Cleaning Up : On land; sweep, shovel or lift into suitable containers. Store away from other materials.

### 6.4 Reference to Other Sections.

See Section 8. Exposure Controls and Personal Protection.

## SECTION 7 : Handling and Storage

### 7.1 Precautions for Safe Handling

Precautions for Safe Handling : Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking or leaving work. Provide good ventilation in process area to prevent formation of vapors. Keep away from sources of ignition - no smoking. Obtain special instructions before use.

Hygiene Measures : Wash hands and face thoroughly after handling.

### 7.2 Conditions for Safe Storage - Including any Incompatibilities

Storage Conditions : Keep only in the original container in a cool, well ventilated place. Do not expose to temperatures exceeding 50 deg. C / 122 deg. F.

Incompatible Products : Strong bases. Strong acids.

Incompatible Materials : Sources of ignition. Heat sources. Combustible materials.

Storage Area : Store in cool, well ventilated area.

### 7.3 Specific End Use(s)

Molded Fiberglass Reinforced Plastic Parts.

## SECTION 8 : Exposure Controls / Personal Protection

### 8.1 Exposure Parameters / Control

| Hydrated Alumina (CAS No. 21645-51-2) | | |
|---|---|---|
| USA ACGIH | ACGIH TWA (mg/m$^3$) | 1 mg/m$^3$ Inhalable Dust |
| USA OSHA | OSHA PEL (TWA) (mg/m$^3$) | 15 mg/m$^3$ Total Dust |
| Styrene (CAS No. 100-42-5) | | |
| USA ACGIH | ACGIH TWA (ppm) | 20 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 40 ppm |
| USA OSHA | OSHA PEL (TWA) (ppm) | 100 ppm |
| USA OSHA | OSHA PEL (ceiling) (ppm) | 200 ppm |
| Composite Industry | Composite Industry PEL (ppm) | 50 ppm - Agreed upon by Composites Industry. |

| Zinc Stearate (CAS No. 557-05-1) | | | |
|---|---|---|---|
| USA ACGIH | ACGIH TWA (mg/m$^3$) | 10 mg/m$^3$ | Inhalable Dust |
| USA OSHA | OSHA PEL (TWA) (mg/m$^3$) | 15 mg/m$^3$ | Total Dust |

| Kaolin (Clay) (CAS No. 1332-58-7) | | | |
|---|---|---|---|
| USA ACGIH | ACGIH TWA (mg/m$^3$) | 2 mg/m$^3$ | Inhalable Dust |
| USA OSHA | OSHA PEL (TWA) (mg/m$^3$) | 15 mg/m$^3$ | Total Dust |

| Fiberglass (Fibrous Glass) (CAS No. 65997-17-3) | | |
|---|---|---|
| USA ACGIH | ACGIH TWA (mg/m$^3$) | 5 mg/m$^3$ Inhalable & 1 Fiber/cc Resp. |
| USA OSHA | OSHA PEL (TWA) (mg/m$^3$) | 15 mg/m$^3$ Total Dust & 1 Fiber/cc Resp. |

### 8.2 Exposure Controls

Appropriate Engineering Controls : Ensure that eyewash stations and safety showers are close to the workstation location. Ensure exposure below occupational exposure limits. Proper ventilation required.

Personal Protective Equipment : Avoid all unnecessary exposure. Safety glasses and gloves.

Hand Protection : Wear protective gloves.

Eye Protection : Safety glasses or goggles.

Respiratory Protection : Wear approved mask when Necessary.

Other Information : When preparing / molding, DO NOT eat, drink or smoke.

## SECTION 9 : Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

Physical State : Solid.

Color : Natural.

Odor : Strong. Aromatic. Pungent. Characteristic.

Odor Threshold : 0.32 ppm

pH : Not applicable.

Relative Evaporation Rate (butyl Ac=1) : <1.0 (Styrene)

Melting Point : Not applicable.

Freezing Point : No data available.

Boiling Point : Not Applicable

Flash Point : Not applicable

Self Ignition Temperature : No data available.

Decomposition Temperature : No data available.

Flammability (Solid, Gas) : Not Applicable

Vapor Pressure : 5 mm Hg (Styrene @ 68 deg. F).

Relative Vapor Density @ 20 deg. C : 3.6 (Styrene).

Relative Density : Specific Gravity - (1.50 - 2.00).

Solubility : Insoluble in water.

Viscosity (Kinematic) : No data available.

Viscosity (Dyanamic) : No data available.

Explosive Properties : Possible fire hazard.

Oxidizing Properties : No data available.

Explosive Limits : 1.1 - 6.1 vol% (Styrene)

### 9.2 Other Information

No Additional Information Available.

## SECTION 10 : Stability and Reactivity

### 10.1 Reactivity

No reactivity hazard other than the effects described in sub sections below.

### 10.2 Chemical Stability

Hazardous polymerization may occur if exposed to high temperatures. Mass may explode in fire.

### 10.3 Possibility of Hazardous Reactions

Do not store near oxidizing agents.

### 10.4 Conditions to Avoid

Heat and open flames. Extremely high temperatures. Direct sunlight.

### 10.5 Incompatible Materials

Oxidizing agents. Strong acids. Strong bases.

### 10.6 Hazardous Decomposition Products

Carbon dioxide. Toxic fumes. Carbon monoxide.

## SECTION 11 : Toxicological Information

### 11.1 Information on Toxicological Effects

Acute Toxicity : Not classified

| Styrene (CAS No. 100-42-5) | |
|---|---|
| LD50 - Oral Rat | 2650 mg/kg |
| ATE (Dust / Mist) | 1.500 mg/l/4h |

| Zinc Stearate (CAS No. 557-05-1) | |
|---|---|
| LD50 - Oral Rat | >10000 mg/kg |

Skin Corrosion / Irritation : May cause skin irritation.

Eye Damage / Irritation : May cause serious eye irritation.

Respiratory or Skin Sensitization : Not classified.

Germ Cell Mutagenicity : Not classified based on available data, the classification criteria not met.

Carcinogenicity : Styrene is listed as possible human carcinogens by the International Agency for Research on Cancer [IARC] and stryene is listed as reasonably anticipated to be a human carcinogen by the National Toxicology Program [NTP].

| Styrene (CAS No. 100-42-5) | |
|---|---|
| IARC Group | 2B |
| National Toxicology Program [NTP] Status | 3 |

Reproductive Toxicity : Not classified based on available data, the classification criteria not met.

Specific Target Organ Toxicity (1-Expos.) : Not classified based on available data, the classification criteria not met.

Specific Target Organ Toxicity (Repeat) : Not classified based on available data, the classification criteria not met.

Aspiration Hazard : Not classified based on available data, the classification criteria not met.

Potential Adverse Human Health Effects : Not classified based on available data, the classification criteria not met.

Symptoms / Injuries after Inhalation : Possible shortness of breath.

Symptoms / Injuries after Skin Contact : May cause skin irritation.

## SECTION 12 : Ecological Information

### 12.1 Toxicity

No additional information available.

### 12.2 Persistence and Degradability

| Sheet Molding Compound | |
|---|---|
| Persistence and degradability | Not established. |

### 12.3 Bioaccumulative Potential

| Sheet Molding Compound | |
|---|---|
| Bioaccumulative potential | Not esteblished |

### 12.4 Mobility in Soil

No additional information available.

### 12.5 Other Adverse Effects

None known.

## SECTION 13 : Disposal Considerations

### 13.1 Waste Disposal / Treatment Methods

Waste Disposal Recommendations : Dispose of in a safe manner in accordance with local, state and federal regulations.

## SECTION 14 : Transportation Information

**** THIS PRODUCT IS NOT REGULATED BY USDOT FOR DOMESTIC GROUND TRANSPORTATION ****

### 14.1 UN Number

UN-No. (DOT) : Not applicable.

### 14.2 UN Proper Shipping Name

DOT Proper Shipping Name : Not applicable.

### 14.3 Additional Information

Other Information : No supplementary information available.

## SECTION 15 : Regulatory Information

### 15.1 US Federal Regulations

| Sheet Molding Compound | |
|---|---|
| EPA TSCA Regulatory Flag | All components of this product / material comply with the Toxic Substances Control Act (TSCA) inventory requirements. |
| SARA Section 311 / 312 Hazard Classes | Immediate (Acute) Health Hazard; Delayed (Chronic) Health Hazard; Fire Hazard. |
| SARA Section 313 TRI - Emission Reporting | |

| Material | Styrene [%] | Zinc St. [%] | | | |
|---|---|---|---|---|---|
| 922 | 16.3 | 1.84 | | | |
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### 15.2 International Regulations

**CANADA**

No additional information available.

**EU - Regulations**

No additional information available.

**Classification According to Regulation (EC) No.1272 / 2008 [CLP]**

No additional information available.

**Classification According to Directive 67 / 548 / EEC or 1999 / 45 / EC**

No additional information available.

**15.2.2 - National Regulations**

No additional information available.

### 15.3 US State Regulations - California Proposition 65

| Styrene (CAS No. 100-42-5) | |
|---|---|
| Warning | This Product contains a chemical known to the State of California to cause cancer. |

## SECTION 16 : Other Information

**Date Prepared : 4/15/15** **Revision Date : 3/27/17**

| HMIS Label - SMC | |
|---|---|
| 1 | FIRE HAZARD |
| 1 | HEALTH HAZARD |
| 1 | REACTIVITY |
| B | PERSONAL PROTECTION |

**SDS - US (GHS HazCom - 2012)**

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