

**TEIJIN AUTOMOTIVE TECHNOLOGIES** 

## **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

Grabill Product Grades : 834UV

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

Teijin Automotive Technologies

255 Rex Boulevard Auburn Hills, MI 48326

Telephone: (248) 823-5664 or (248) 237-7800

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)





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.



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## **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	48 - 54%	Not Classified		
Styrene	(CAS No.) 100-42-5	11 - 15%	Flammable Liquid 3 - H226		
			Acute Tox. 4 (Inhalation) - H332		
			Skin Irritation 2 - H315		
			Eye Irritation 2A - H319		
Hydrated Alumina	(CAS No.) 21645-51-2	8 - 14%	Not Classified		
Carbon Black	(CAS No.) 1333-86-4	3-5%	Carcinogen 2 - H351		
		•			

## **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

2/4/2022 EN (English) Page 2 / 7



**TEIJIN AUTOMOTIVE TECHNOLOGIES** 

## **Sheet Molding Compound Safety Data Sheet**

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

## 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 <sup>3</sup> )	1 mg/m <sup>3</sup> Inhalable Dust			
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m³ 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.

2/4/2022 EN (English) Page 3 / 7

#### TEIJIN

#### **TEIJIN AUTOMOTIVE TECHNOLOGIES**

# **Sheet Molding Compound Safety Data Sheet**

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

Fiberglass (Fibrous Glass) (CAS No. 65997-17-3)						
USA ACGIH	ACGIH TWA (mg/m3)	5 mg/3 Inhalable & 1 Fiber/cc Resp.				
USA OSHA	OSHA PEL (mg/m3)	15 mg/m3 Total Dust & 1 Fiber /cc Res				
Carbon Black (CAS No. 1333-86-4	1)					
	ACGIH TWA (mg/m³)	3 mg/m <sup>3</sup>				
USA OSHA	OSHA PEL (TWA) (mg/m³) 3.5 mg/m³					
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 : Black

Odor : Strong. Aromatic. Pungent. Characteristic.
Odor Threshold : 0.32 ppm

Not applicable. pΗ <1.0 (Styrene) Relative Evaporation Rate (butyl Ac=1) Melting Point Not applicable. Freezing Point No data available. **Boiling Point** Not Applicable Not applicable Flash Point No data available. Self Ignition Temperature **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 - (1.65 - 1.85).

Solubility : Insoluble in water.

Viscosity (Kinematic) : No data available.

Viscosity (Dynamic) : No data available.

Explosive Properties : Possible fire hazard.

Oxidizing Properties : No data available.

Explosive Limits : 1.1 - 6.1 volume% (Styrene)

9.2 Other Information

No Additional Information Available.

2/4/2022 EN (English) Page 4 / 7



**TEIJIN AUTOMOTIVE TECHNOLOGIES** 

## **Sheet Molding Compound Safety Data Sheet**

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

## 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.

#### 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

2 1 21 1 (2121) 1222	
Carbon Black (CAS No. 1333-86-4	4)

Carbon Black (CAS No. 1333-86-4)		
LD50 - Oral Rat	> 8000 mg/kg.	
LD50 - Dermal Rat	No Data Available	
LC50 - Inhalation Rat	No Data Available	

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 and carbon black dust are listed as possible human carcinogens

by the International Agency for research on Cancer [IARC] and styrene 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

Carbon Black (CAS No. 133-86-	4)
IARC Group	2B

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.

2/4/2022 EN (English) Page 5 / 7

## TEIJIN

#### **TEIJIN AUTOMOTIVE TECHNOLOGIES**

## **Sheet Molding Compound Safety Data Sheet**

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

## **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 Bio accumulative Potential

Sheet Molding Compound	
Bio accumulative potential	Not established

## 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 Recommendation : 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 (/	Immediate (Acute) Health Hazard; Delayed (Chronic) Health Hazard; Fire Hazard.					
SARA Section 313 TRI - Emission Reporting	Material	Styrene [%]	Zinc St. [%]				
	834UV	13.2					



2/4/2022 EN (English) Page 6 / 7



**TEIJIN AUTOMOTIVE TECHNOLOGIES** 

# **Sheet Molding Compound Safety Data Sheet**

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

## 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 can		
Carbon Black (CAS No. 1333-86-4)		
Warning	This Product contains a chemical known to the State of California to cause cancer.	

## **SECTION 16: Other Information**

Date Prepared: 9/10/2020 Revision Date: 2/4/2022

HMIS Label - SMC		
1	FIRE HAZARD	
1	HEALTH HAZARD	
1	REACTIVITY	
В	PERSONAL PROTECTION	

New GHS Hazards Rating - SMC			
HEALTH	4	Slight	
FLAMMABILITY	4	Slight	
REACTIVITY	4	Slight	
PERSONAL PROTECTION	В		

SDS - US (GHS HazCom - 2012)

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