

SECTION 1: Identification

1.1. Identification

Product name : Echo Flow

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Building material

1.3. Details of the supplier of the safety data sheet

Shredded Tire Inc.
6742 NW 17th Ave
Fort Lauderdale, FL 33309

1.4. Emergency telephone number

Emergency number : 844-480-8473

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labeling

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Rubber, natural	(CAS No) 9006-04-6	Trade Secret	Not classified
Styrene-butadiene copolymer	(CAS No) 9003-55-8	Trade Secret	Not classified
Carbon black	(CAS No) 1333-86-4	Trade Secret	Not classified
Synthetic fibers, fillers, accelerators, anti-ozonants	None	Trade Secret	Not classified
Quartz	(CAS No) 14808-60-7	Trade Secret	Acute Tox. 4 (Oral), H302 Carc. 1A, H350
Cement, portland, chemicals	(CAS No) 65997-15-1	Trade Secret	Not classified
Fumes, silica	(CAS No) 69012-64-2	Trade Secret	Not classified
Slags, ferrous metal, blast furnace	(CAS No) 65996-69-2	Trade Secret	Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 1A, H350 STOT SE 3, H335
Zinc oxide (ZnO)	(CAS No) 1314-13-2	Trade Secret	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sulfur	(CAS No) 7704-34-9	Trade Secret	Skin Irrit. 2, H315
Cement, alumina, chemicals	(CAS No) 65997-16-2	Trade Secret	Not classified
Silica, amorphous	(CAS No) 7631-86-9	Trade Secret	Not classified
Calcium sulfate dihydrate	(CAS No) 10101-41-4	Trade Secret	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim from source of exposure to fresh air. If breathing is difficult administer oxygen. Seek medical attention.
- First-aid measures after skin contact : Wash with soap and water. Seek medical advice if skin irritation develops or persists.
- First-aid measures after eye contact : Flush with plenty of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
- First-aid measures after ingestion : Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause moderate irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : May be harmful if swallowed.

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 : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : None known.
- Explosion hazard : None known.

5.3. Advice for firefighters

- Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : No special measures required.
- Methods for cleaning up : Attempt to reclaim the product, if this is possible.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid generating dust. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : No special storage conditions required.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fumes, silica (69012-64-2)

Not applicable

Rubber, natural (9006-04-6)		
ACGIH	ACGIH TWA (mg/m ³)	0.0001 mg/m ³ (inhalable particulate matter)
Styrene-butadiene copolymer (9003-55-8)		
Not applicable		
Carbon black (1333-86-4)		
ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ (inhalable particulate matter)
OSHA	OSHA PEL (TWA) (mg/m ³)	3.5 mg/m ³
IDLH	US IDLH (mg/m ³)	1750 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	3.5 mg/m ³ 0.1 mg/m ³ (Carbon black in presence of Polycyclic aromatic hydrocarbons)
Zinc oxide (ZnO) (1314-13-2)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (respirable particulate matter)
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (respirable particulate matter)
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ (fume) 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
IDLH	US IDLH (mg/m ³)	500 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³ (dust and fume)
NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³ (fume)
NIOSH	NIOSH REL (ceiling) (mg/m ³)	15 mg/m ³ (dust)
Sulfur (7704-34-9)		
Not applicable		
Synthetic fibers, fillers, accelerators, anti-ozonants		
Not applicable		
Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)
Cement, portland, chemicals (65997-15-1)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
IDLH	US IDLH (mg/m ³)	5000 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
Cement, alumina, chemicals (65997-16-2)		
Not applicable		
Silica, amorphous (7631-86-9)		
IDLH	US IDLH (mg/m ³)	3000 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
Calcium sulfate dihydrate (10101-41-4)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
Slags, ferrous metal, blast furnace (65996-69-2)		
Not applicable		

8.2. Exposure controls

Appropriate engineering controls	: Provide adequate ventilation.
Hand protection	: protective gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Wear suitable working clothes.
Respiratory protection	: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Odor	: Characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

Not determined.

10.6. Hazardous decomposition products

Not determined.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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Carbon black (1333-86-4)	
LD50 oral rat	> 15400 mg/kg
Zinc oxide (ZnO) (1314-13-2)	
LD50 oral rat	> 5000 mg/kg
Sulfur (7704-34-9)	
LD50 oral rat	> 3000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 9.23 mg/l/4h
Quartz (14808-60-7)	
ATE US (oral)	500 mg/kg
Silica, amorphous (7631-86-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 2.2 mg/l (Exposure time: 1 h)

Skin corrosion/irritation : Not classified
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitization : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified

Styrene-butadiene copolymer (9003-55-8)	
IARC group	3 - Not classifiable

Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Silica, amorphous (7631-86-9)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
 Specific target organ toxicity – single exposure : Not classified
 Specific target organ toxicity – repeated exposure : Not classified
 Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Sulfur (7704-34-9)	
LC50 fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC50 fish 2	< 14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Silica, amorphous (7631-86-9)	
LC50 fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Silica, amorphous (7631-86-9)	
BCF fish 1	(no bioaccumulation expected)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available
 Effect on the global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Fumes, silica (69012-64-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Styrene-butadiene copolymer (9003-55-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).
Carbon black (1333-86-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Zinc oxide (ZnO) (1314-13-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sulfur (7704-34-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cement, portland, chemicals (65997-15-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Cement, alumina, chemicals (65997-16-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Silica, amorphous (7631-86-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Slags, ferrous metal, blast furnace (65996-69-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State regulations

Carbon black (1333-86-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

Fumes, silica (69012-64-2)

U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List

Carbon black (1333-86-4)

U.S. - Massachusetts - Right To Know List
 U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Zinc oxide (ZnO) (1314-13-2)

U.S. - Massachusetts - Right To Know List
 U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Sulfur (7704-34-9)

U.S. - Massachusetts - Right To Know List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Quartz (14808-60-7)

U.S. - Massachusetts - Right To Know List
 U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Cement, portland, chemicals (65997-15-1)

U.S. - Massachusetts - Right To Know List
 U.S. - Minnesota - Hazardous Substance List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Silica, amorphous (7631-86-9)

U.S. - Massachusetts - Right To Know List
 U.S. - Minnesota - Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



BUILDING UNITS FOR ROOFING SYSTEM
AS TO EXTERNAL FIRE EXPOSURE
<R38782>