

## 1. Identification

**Product identifier** ASPHALT COATED STEEL PRODUCTS

**Other means of identification**

SDS number 7

Product code Various.

**Recommended use** Industrial use.

**Recommended restrictions** None known.

**Manufacturer / Importer / Supplier / Distributor information**

**Company name** Contech Engineered Solutions, LLC

**Address** 9025 Centre Pointe Drive West Chester, Ohio 45069, United States

**Contact person** Dan Moody

**Telephone number** 513-645-7055

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**Emergency telephone number** 1-800-255-3924

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

**Supplemental information**

Not applicable.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	CAS number	%
Iron	7439-89-6	75 -95
Asphalt	8052-42-4	5 - 20
Aluminum	7429-90-5	4
Zinc	7440-66-6	4

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

**Inhalation** If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Contact with dust: Wash off with soap and water. Get medical attention if irritation develops and persists. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area.

<b>Eye contact</b>	Dust in the eyes: Do not rub eyes. Rinse with water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Not likely, due to the form of the product. Dust: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Contact with dust: Irritation of eyes and mucous membranes. Irritation of nose and throat.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Special powder against metal fires. Dry sand. In case of aluminum fires, use a class D dry-powder extinguisher (Lith-X).
<b>Unsuitable extinguishing media</b>	Do not use halogenated extinguishing agents or foam.
<b>Specific hazards arising from the chemical</b>	Not a fire hazard unless in particle form. Suspensions of aluminum dust in air may pose a severe explosion hazard. A potential for explosion exists for a mixture of fine and coarse particles if at least 15% to 20% of the material is finer than 44 microns (325 mesh). Buffing and polishing generate finer material than grinding, sawing and cutting. Fire or high temperatures create: Metal oxides.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid generation and spreading of dust. Ensure adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.
<b>Methods and materials for containment and cleaning up</b>	The product is immiscible with water and will sediment in water systems. Allow spilled material to solidify and scrape up with shovels into a suitable container for recycle or disposal. Collect dust or particulates using a vacuum cleaner with a HEPA filter.
<b>Environmental precautions</b>	Not relevant, due to the form of the product.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Welding, burning, sawing, brazing, grinding or machining operations may generate fumes and dusts of metal oxides. Provide adequate ventilation. Avoid contact with sharp edges and hot surfaces. Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Avoid contact with molten material. Avoid inhalation of fumes from molten product. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials (See Section 10).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	PEL	5 mg/m3	Respirable dust.
		15 mg/m3	Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminum (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Asphalt (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fraction.

#### US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.

**US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)**

<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Aluminum (CAS 7429-90-5)	TWA	5 mg/m3	Welding fume or pyrophoric powder.
		5 mg/m3	Respirable.
		10 mg/m3	Total

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Special ventilation should be used to convey finely divided metallic dust generated by grinding, sawing etc., in order to eliminate explosion hazards. Observe occupational exposure limits and minimize the risk of inhalation of dust.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If contact is likely, safety glasses with side shields are recommended. In addition to safety glasses or goggles, a welding helmet with appropriate shaded shield is required during welding, burning, or brazing. A face shield is recommended, in addition to safety glasses or goggles, during sawing, grinding, or machining. Eye wash fountain is recommended.

**Skin protection**

**Hand protection** Wear suitable protective gloves to prevent cuts and abrasions. When material is heated, wear gloves to protect against thermal burns. Suitable gloves can be recommended by the glove supplier.

**Other** Wear suitable protective clothing.

**Respiratory protection** Use an approved respirator designed for the hazard, where concentrations exceed exposure limits. The use of both primary and secondary protective equipment is necessary when handling molten metal. Refer to "Aluminum Association" guidelines. Use a NIOSH-approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CFR 1910.134, respiratory protection standard). Seek advice from local supervisor.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

**Physical state** Solid.

**Form** Pipe. Plate. Sheets. Strips.

**Color** Black.

**Odor** Odorless.

**Odor threshold** Not applicable.

**pH** Not applicable.

**Melting point/freezing point** 200 °F (93.33 °C)

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Fine particles may form explosive mixtures with air.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Explosive limit - lower (%)** Not applicable.

**Explosive limit - upper (%)** Not applicable.

**Vapor pressure** Not applicable.

**Vapor density** Not applicable.

**Relative density** 8

**Solubility(ies)** Insoluble in water.

**Partition coefficient (n-octanol/water)** Not applicable.

<b>Auto-ignition temperature</b>	905 °F (485 °C)
<b>Decomposition temperature</b>	Not applicable.
<b>Viscosity</b>	Not applicable.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Massive metal is stable under normal conditions of use, storage and transport.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with acids. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong mineral acids.
<b>Hazardous decomposition products</b>	Welding, burning, sawing, brazing, grinding or machining operations may generate dusts and fumes of metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Not relevant, due to the form of the product in its manufactured and shipped state.
<b>Inhalation</b>	Dust and fumes generated from the material can enter the body by inhalation. Dust may irritate respiratory system. Inhalation of powder or fumes may cause metal fume fever.
<b>Skin contact</b>	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate skin.
<b>Eye contact</b>	Dust may irritate the eyes.

**Symptoms related to the physical, chemical and toxicological characteristics** Dust: Irritation of eyes and mucous membranes. Irritation of nose and throat.

### Information on toxicological effects

**Acute toxicity** Inhalation of powder or fumes may cause metal fume fever.

Components	Species	Test Results
Iron (CAS 7439-89-6)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	30 g/kg
<b>Skin corrosion/irritation</b>	May cause irritation through mechanical abrasion.	
<b>Serious eye damage/eye irritation</b>	May cause irritation through mechanical abrasion.	
<b>Respiratory sensitization</b>	Not classified.	
<b>Skin sensitization</b>	Not a skin sensitizer.	
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.	

### IARC Monographs. Overall Evaluation of Carcinogenicity

Asphalt (CAS 8052-42-4) 2B Possibly carcinogenic to humans.  
3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to benign pneumoconiosis (siderosis). May cause damage to the liver.
<b>Further information</b>	Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Aluminum fumes generated during welding or melting present low health risks. Welding or plasma arc cutting of aluminum alloys can generate ozone, nitric oxides and ultraviolet radiation. Ozone overexposure may result in mucous membrane irritation or pulmonary discomfort.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Iron (CAS 7439-89-6)		
<b>Aquatic</b>		
Fish	LC50 Channel catfish ( <i>Ictalurus punctatus</i> )	> 500 mg/l, 96 hours
Zinc (CAS 7440-66-6)		
<b>Aquatic</b>		
Fish	LC50 Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> )	0.24 mg/l, 96 hours

**Persistence and degradability** The product is not biodegradable.

**Bioaccumulative potential** The product is not bioaccumulating.

**Mobility in soil** No data available.

**Mobility in general** No data available.

**Other adverse effects** No data available.

## 13. Disposal considerations

**Disposal instructions** Dispose of waste and residues in accordance with local authority requirements.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** No special precautions.

## 14. Transport information

### DOT

Not regulated as a hazardous material by DOT.

### IATA

Not regulated as a dangerous good.

### IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Asphalt (CAS 8052-42-4)

LISTED

Zinc (CAS 7440-66-6)

LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Clean Water Act (CWA)  
Section 112(r) (40 CFR  
68.130)** Priority pollutant  
Toxic pollutant

**Safe Drinking Water Act  
(SDWA)** Not regulated.

**Food and Drug  
Administration (FDA)** Not regulated.

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Aluminum (CAS 7429-90-5)

Asphalt (CAS 8052-42-4)

Zinc (CAS 7440-66-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Aluminum (CAS 7429-90-5) 500 lbs

Zinc (CAS 7440-66-6) 500 lbs

**US. Pennsylvania RTK - Hazardous Substances**

Aluminum (CAS 7429-90-5)

Asphalt (CAS 8052-42-4)

Zinc (CAS 7440-66-6)

**US. Rhode Island RTK**

Aluminum (CAS 7429-90-5)

Zinc (CAS 7440-66-6)

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Asphalt (CAS 8052-42-4)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

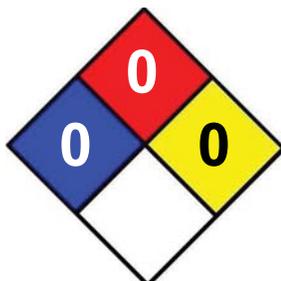
**Issue date** 08-August-2013

**Revision date** -

**Version #** 01

**Further information** NFPA Ratings: Health: 0. Flammability: 0. Physical hazard: 0.  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**NFPA Ratings**



**List of abbreviations** NFPA: National Fire Protection Association.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.