SAFETY DATA SHEET

1. Identification

Product identifier **Zinc coated steel product**

Other means of identification

SDS number 2

Product code 18,50,87,110,119,130,150,180,187, 189,210,220,230,664,964,SLOT

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
E-mail dmoody@conteches.com
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 The mixture does not meet the criteria for classification.

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	70-99
Zinc	7440-66-6	1-30

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.

Eye contact 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.

Ingestion	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.
Most important symptoms/effects, acute and delayed	Contact with dust: Irritation of eyes and mucous membranes. Irritation of nose and throat.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Special powder against metal fires. Dry sand.
Unsuitable extinguishing media	Do not use halogenated extinguishing agents or foam.
Specific hazards arising from the chemical	Dust may form explosive mixture with air. Fire or high temperatures create: Metal oxides.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move container from fire area if it can be done without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	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.
Methods and materials for containment and cleaning up	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.
Environmental precautions	Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling	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.
Conditions for safe storage, including any incompatibilities	Keep dry. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Minimize dust generation and accumulation. Ventilate as needed to control airborne dust. Use explosion-proof ventilation equipment if airborne dust levels are high. The risk of inhalation of dust must be minimized as much as possible.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear dust-resistant safety goggles where there is danger of eye contact.
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 a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. 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. Sheets. Strips
Color	Metallic.
Odor	Odorless.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
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 available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	8
Solubility(ies)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Massive metal is stable under normal conditions of use, storage and transport.
Possibility of hazardous reactions	Hazardous polymerization does not occur. Contact with acid liberates flammable gas.
Conditions to avoid	Contact with acids. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong mineral acids.
Hazardous decomposition products	Metal oxides. Hydrogen gas.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not relevant, due to the form of the product in its manufactured and shipped state.
Inhalation	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.
Skin contact	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate skin.
Eye contact	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)		
Acute		
Oral		
LD50	Rat	30 g/kg

Skin corrosion/irritation May cause irritation through mechanical abrasion.

Serious eye damage/eye irritation May cause irritation through mechanical abrasion.

Respiratory sensitization Not classified.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Not classified.

Chronic effects Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to benign pneumoconiosis (siderosis). May cause damage to the liver.

Further information 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.

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)			
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	> 500 mg/l, 96 hours
Zinc (CAS 7440-66-6)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

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)

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 This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Zinc (CAS 7440-66-6)

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

Zinc (CAS 7440-66-6)	500 lbs

US. Pennsylvania RTK - Hazardous Substances

Zinc (CAS 7440-66-6)

US. Rhode Island RTK

Zinc (CAS 7440-66-6)

US. California Proposition 65

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

Not listed.

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

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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).

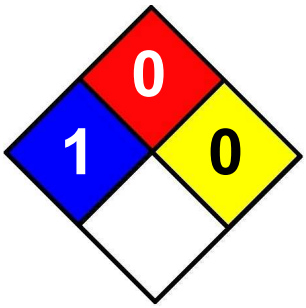
16. Other information, including date of preparation or last revision

Issue date 25-July-2013

Revision date -

Version # 01

NFPA Ratings



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.