



# SAFETY DATA SHEET

## ZINC-IRON METAL COATED STEEL STRIP AND SHEET

Infosafe No.: HXSV2  
Version No.: 3.1  
ISSUED Date : 11/01/2018  
ISSUED by: BlueScope Steel Limited

### 1. IDENTIFICATION

#### GHS Product Identifier

ZINC-IRON METAL COATED STEEL STRIP AND SHEET

#### Company Name

BlueScope Steel Limited (ABN16 000 011 058)

#### Address

Level 11, 120 Collins St Melbourne  
VIC 3000 Australia

#### Telephone/Fax Number

Telephone: 1800800789 (Australia Only)

#### Emergency phone number

02 4275 7522 (24h)

#### E-mail Address

steeldirect@bluescopesteel.com

#### Recommended use of the chemical and restrictions on use

Metal fabrication

#### Other Names

Name	Product Code
ZINCANNEAL <sup>®</sup> steel, ZINCSEAL <sup>®</sup> steel	

#### Disclaimer

This SDS summarises to BlueScope Steel Limited's (BSL) best knowledge at the date of issue, the health and safety hazards of the relevant materials. As BSL is not aware of and can't control the conditions under which the material may be used, each user is responsible for making their own assessment of the appropriateness of the material for their planned use and to implement appropriate controls.

### 2. HAZARD IDENTIFICATION

#### GHS classification of the substance/mixture

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia..

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

#### Precautionary statement – Prevention

P260 Do not breathe dust/fume.

P280 Wear protective gloves/protective clothing/eye protection.

#### Precautionary statement – Response

P370 In case of fire and/or explosion do not breathe fumes.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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#### Information on Composition

Steel strip with a hot dip zinc-iron alloyed metallic coating

#### Ingredients

Name	CAS	Proportion
Base Metal - All Products		-
Steel	12597-69-2	100 %
=====	=====	=====
Metallic Coating		-
Zinc Iron Coating		60-160g/m2 Total both sides
Iron	7439-89-6	<15 % Fe
Aluminium	7429-90-5	<0.5 % Al
Antimony	7440-36-0	<0.1 % Sb
Zinc	7440-66-6	Balance
=====	=====	=====
Surface Treatment		-
Zinc phosphate	7779-90-0	~50mg/m2 per side
Only on Oiled Products: Corrosion protective oil	Mixture	<2g/m2 per side

### 4. FIRST-AID MEASURES

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#### Inhalation

It is unlikely that this product can be inhaled in the supplied form. If exposed to fumes from welding operations, remove to fresh air.

#### Ingestion

It is unlikely that this product can be ingested in the supplied form.

#### Skin

It is unlikely that this product will cause irritation to the skin in the supplied form. Wash affected area thoroughly with soap and water.

#### Eye contact

It is unlikely that this product will enter the eye(s) in the supplied form. If steel splinters enter the eye, obtain medical attention immediately.

#### First Aid Facilities

Eyewash and normal washroom facilities.

#### Advice to Doctor

Treat symptomatically.

#### Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once.

### 5. FIRE-FIGHTING MEASURES

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#### Suitable Extinguishing Media

Use appropriate fire extinguisher for surrounding environment.

### **Hazards from Combustion Products**

When burnt or overheated the product and packaging may release combustion products including carbon monoxide and metallic oxides.

### **Specific Hazards Arising From The Chemical**

Non combustible material. Some parts of the packaging are combustible.

### **Decomposition Temperature**

Not available

### **Precautions in connection with Fire**

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes.

## **6. ACCIDENTAL RELEASE MEASURES**

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### **Emergency Procedures**

Product should be picked up with suitable lifting equipment. Wear appropriate gloves to avoid cuts when handling.

## **7. HANDLING AND STORAGE**

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### **Precautions for Safe Handling**

Product is expected to be formed and otherwise fabricated. This may include cutting, welding, painting and powder coating. Product should be picked up with suitable lifting equipment. Wear appropriate gloves to avoid cuts when handling. If welding this product there is a possibility of zinc fume generation.

Maintain high standards of personal hygiene i.e.washing hands prior to eating, drinking, smoking or using toilet facilities.

### **Conditions for safe storage, including any incompatibilities**

The material as supplied is not known to be hazardous to the environment. Product must be stored and secured to prevent movement during storage and transport. Store in a dry environment to prevent corrosion in storage. For more information on storing this product, refer to the document 'Recommended Practices for Storage and Handling of BlueScope Steel's products' available from BlueScope Steel sales offices and website.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **Occupational exposure limit values**

No exposure standards have been established for this material, however, the TWA exposure standards for dust not otherwise specified is 10 mg/m<sup>3</sup>.

Aluminium (welding fumes): 5 mg/m<sup>3</sup> TWA

Iron oxide (fume): 5 mg/m<sup>3</sup> TWA

Zinc oxide (fume): 5 mg/m<sup>3</sup> TWA; 10 mg/m<sup>3</sup> STEL

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Source: Safe Work Australia

Any operation, which has the potential of generating particulates including dust or fume, requires a risk assessment to be undertaken. This may require the involvement of an experienced Occupational Hygienist.

### **Biological Limit Values**

No biological limits allocated.

### **Appropriate Engineering Controls**

Use with good general ventilation. No special ventilation is required for the product as supplied.

For processing operations that generate dust or fumes, the use of engineering controls may be necessary to maintain air concentrations below the relevant National Exposure Standards.

### **Respiratory Protection**

Not generally required. If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable filter should be used.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

**Eye Protection**

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

**Hand Protection**

Appropriate gloves should be worn when handling strip or sheet steel, to avoid cuts from splinters, burrs, sharp edges, and contact with any surface treatments including oils if they are present. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**Body Protection**

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance**

Thin steel coil or sheet with matte grey appearance

**Odour**

Not applicable

**Decomposition Temperature**

Not available

**Melting Point**

Base metal: 1500°C (approximate)

**Boiling Point**

Not applicable

**Solubility in Water**

Insoluble

**Specific Gravity**

7.85

**pH**

Not applicable

**Vapour Pressure**

Not applicable

**Vapour Density (Air=1)**

Not applicable

**Evaporation Rate**

Not applicable

**Odour Threshold**

Not applicable

**Viscosity**

Not applicable

**Partition Coefficient: n-octanol/water**

Not applicable

**Flash Point**

Not applicable

**Flammability**

Non combustible material.

**Auto-Ignition Temperature**

Not applicable

**Explosion Limit - Upper**

Not applicable

**Explosion Limit - Lower**

Not applicable

**Kinematic Viscosity**

Not applicable

**Dynamic Viscosity**

Not applicable

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**10. STABILITY AND REACTIVITY**

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**Reactivity**

Refer to hazardous reactions below

**Chemical Stability**

Stable under normal conditions of storage and handling.

**Conditions to Avoid**

None expected, when used as intended.

**Incompatible materials**

Strong acids, strong alkalis

**Hazardous Decomposition Products**

When burnt or overheated the product and packaging may emit carbon monoxide, metallic oxides and other products of combustion.

**Possibility of hazardous reactions**

Contact of metallic substances with acids and alkalis liberates hydrogen gas.

**Hazardous Polymerization**

Will not occur.

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**11. TOXICOLOGICAL INFORMATION**

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**Toxicology Information**

No toxicity data available for this material.

**Ingestion**

It is unlikely that this product can be ingested in the supplied form.

**Inhalation**

It is unlikely that this product can be inhaled in the supplied form. Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

If welding this product there is a possibility of zinc fume generation.

**Skin**

It is unlikely that this product will cause irritation to the skin in the supplied form. The surface oil used for corrosion protection may irritate the skin in sensitive individuals.

**Eye**

It is unlikely that this product will enter the eye(s) in the supplied form.

**Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

Not expected to be a skin sensitiser.

**Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard.

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT-single exposure**

Not expected to cause toxicity to a specific target organ.

**STOT-repeated exposure**

Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**

Not expected to be an aspiration hazard.

**Other Information**

Prolonged contact with the surface oil used for corrosion protection may irritate the skin in sensitive individuals.

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**12. ECOLOGICAL INFORMATION**

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**Ecotoxicity**

No ecological data available for this material.

**Persistence and degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

The material as supplied is not known to be hazardous to the environment.

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**13. DISPOSAL CONSIDERATIONS**

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**Disposal considerations**

This product and packaging can be recycled. If not recycled, any disposal of waste product should be in accordance with local regulations.

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**14. TRANSPORT INFORMATION**

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**Transport Information**

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

**U.N. Number**

None Allocated

**UN proper shipping name**

None Allocated

**Transport hazard class(es)**

None Allocated

**Packing Group**

None Allocated

**UN Number (Air Transport, ICAO)**

None Allocated

**IATA/ICAO Proper Shipping Name**

Not dangerous for conveyance under IATA code

**IATA/ICAO Hazard Class**

None Allocated

**IATA/ICAO Packing Group**

None Allocated

**IMDG UN No**

None Allocated

**IMDG Proper Shipping Name**

Not dangerous for conveyance under IMO/IMDG code

**IMDG Hazard Class**

None Allocated

**IMDG Pack. Group**

None Allocated

**IMDG Marine pollutant**

No

**Transport in Bulk**

Not available

**Special Precautions for User**

Not available

## 15. REGULATORY INFORMATION

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**Regulatory information**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia..

REGULATION (EC) No 1907/2006 (REACH) Article 7.1 - Not Applicable

REGULATION (EC) No 1907/2006 (REACH) Article 7.2 - Not Applicable

REGULATION (EC) No 1907/2006 (REACH) Article 33 – Not Applicable

**Poisons Schedule**

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

## 16. OTHER INFORMATION

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**Date of preparation or last revision of SDS**

SDS amendment: February 2018

5. Fire-fighting measures

8. Exposure controls/personal protection

SDS Reviewed: January 2018 Supersedes: December 2012

**References**

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

**Other Information**

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## END OF SDS

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