



SAFETY DATA SHEET

ZINC METAL COATED STEEL STRIP AND SHEET

Infosafe No.: HXSV1
Version No.: 4.1
ISSUED Date : 12/01/2018
ISSUED by: BlueScope Steel Limited

1. IDENTIFICATION

GHS Product Identifier

ZINC 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

General fabrication, Roll Formed Structural Sections, Pipe and Tube Fabrication, Automotive Components

Other Names

Name	Product Code
GALVABOND® steel, GALVAFORM® steel, GALVASPAN® steel, ZINCFORM® steel, ZINC HI-TEN® steel, TUBEFORM® steel and ZINCMATTE® 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

Information on Composition

Steel strip with a hot dipped zinc metallic coating

Ingredients

Name	CAS	Proportion
Base Metal		-
Steel	12597-69-2	100 %
=====	=====	=====
Metallic Coating		-
Zinc Coating		100-900g/m2 total both sides
Aluminium	7429-90-5	<1 %
Antimony	7440-36-0	<0.2 %
Zinc	7440-66-6	Balance
=====	=====	=====
Surface Treatment		-
Chromated products only:		-
Hexavalent Chromium Compounds	Mixture	Max 60mg/m2 per side
Oiled Products only: Corrosion inhibiting oil	Mixture	~1500mg/m2 total both sides

4. FIRST-AID MEASURES

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

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

Emergency Procedures

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

7. HANDLING AND STORAGE

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

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/m³.

Aluminium (welding fumes): 5 mg/m³ TWA

Iron oxide (fume): 5 mg/m³ TWA

Zinc oxide (fume): 5 mg/m³ TWA; 10 mg/m³ STEL

Chromium (VI) compounds: 0.05 mg/m³ TWA

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

Appearance

Thin steel coil or sheet with metallic silver 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

10. STABILITY AND REACTIVITY

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.

11. TOXICOLOGICAL INFORMATION

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. The surface treatment used for corrosion protection contains small quantities of chromium (VI) compounds.

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. The surface treatment used for corrosion protection contains small quantities of chromium (VI) compounds. Prolonged skin contact may lead to chromium sensitisation in sensitive individuals.

12. ECOLOGICAL INFORMATION

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.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

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

14. TRANSPORT INFORMATION

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

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

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

TUBEFORM® steel, GALVABOND® steel, GALVAFORM® steel, GALVASPAN® steel, ZINCFORM® steel, ZINC HI-TEN® steel and ZINCMATTE® steel are registered trademarks of BlueScope Steel Limited.

END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical

Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.