

# Material Safety Data Sheet

Next Generation ZINCALUME® steel with Activate™ technology;  
Aluminium/zinc/magnesium alloy coated steel strip and sheet

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by  
BSLAUS

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product Name

Next Generation ZINCALUME® steel with Activate™ technology; Aluminium/zinc/magnesium alloy coated steel strip and sheet

### Company Name

BlueScope Steel Limited (ABN 16 000 011 058)

### Address

Level 11, 120 Collins St Melbourne  
VIC 3000 Australia

### Emergency Tel.

02 4275 7522 (24h)

### Telephone/Fax Number

Telephone: 1800800789 (Australia Only)

### Email

steeldirect@bluescopesteel.com

### Recommended Use

Metal fabrication, roofing and wall cladding

### Other Names

#### Name

Next Generation ZINCALUME® steel with Activate™ technology,  
AMFGM; Aluminium/zinc/magnesium alloy coated steel strip and  
sheet

## 2. HAZARDS IDENTIFICATION

### Hazard Classification

Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.  
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

### Safety Phrase(s)

S22 Do not breathe dust.  
S24 Avoid contact with skin.  
S37 Wear suitable gloves.  
S41 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 aluminium zinc magnesium alloy coating.

### Ingredients

Name	CAS	Proportion
Base Metal		
Steel	12597-69-2	100 %
=====		
Metallic Coating		
Aluminium Zinc Magnesium Coating		100-150 g/m2 total both sides
Aluminium	7429-90-5	47-57 %
Magnesium	7439-95-4	1-3 %
Silicon	7440-21-3	<2 %
Zinc	7440-66-6	Balance
=====		
Surface Treatment		
Chromium III Compound		70-90 mg/m2 per side
Acrylic resin - no hazardous materials		
Oiled Products only:	Mixture	1500mg/m2 total both sides
Corrosion inhibiting oil		

## 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**

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.

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## 5. FIRE FIGHTING MEASURES

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**Suitable Extinguishing Media**

Use appropriate fire extinguisher for surrounding environment.

**Hazards from Combustion Products**

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

**Specific Hazards**

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

**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.

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## 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.

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## 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 ie. washing hands prior to eating, drinking, smoking or using toilet facilities.

**Conditions for Safe Storage**

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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**National Exposure Standards**

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 (Metal dust): 5 mg/m<sup>3</sup> TWA

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

Magnesium oxide (fume): 10 mg/m<sup>3</sup> TWA

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

Chromium III Compounds: 0.5 mg/m<sup>3</sup> 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.

**Engineering Controls**

Use with good general ventilation. No special ventilation is required for the product as supplied. During slitting or roll forming operations on resin coated product, abrasion and/or excessive drag pad pressure on the steel surface can generate resin dust.

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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**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 Value**

Not applicable

**Vapour Pressure**

Not applicable

**Vapour Density (Air=1)**

Not applicable

**Evaporation Rate**

Not applicable

**Odour Threshold**

Not applicable

**Viscosity**

Not applicable

**Octanol/Water Partition Coefficient**

Not applicable

**Flash Point**

Not applicable

**Flammability**

Non combustible material.

**Auto-Ignition Temperature**

Not applicable

**Kinematic Viscosity**

Not applicable

**Dynamic Viscosity**

Not applicable

**Explosion Limit - Upper**

Not applicable

**Explosion Limit - Lower**

Not applicable

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**10. STABILITY AND REACTIVITY**

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**Stability and 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.

**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**

This product has been tested to AS/NZS 4020:2002 'Products for use in contact with drinking water' and meets the requirements of the Australian Drinking Water Guidelines.

**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.

**Ingestion**

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

**Skin**

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.

**Chronic Effects**

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 / Degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

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.

**IMDG Marine Pollutant**

No

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## 15. REGULATORY INFORMATION

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**Regulatory Information**

Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), 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).  
Manufactured in accordance with Appendix 1, Uniform Paint standard of the SUSMP

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## 16. OTHER INFORMATION

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**Date of preparation or last revision of MSDS**

SDS amendment: August 2013

1. Identification of the Material and Supplier  
9. Physical and chemical properties  
16. Other Information

SDS Reviewed: March 2013 Supersedes: December 2012

**Other Information**

ZINCALUME® steel is a registered trademark of BlueScope Steel Limited.  
Activate™ technology is a trademark of BlueScope Steel Limited.

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End of MSDS

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