



BlueScope Steel Limited
ABN 16 000 011 058
Western Port Works
Bayview Road
Hastings VIC. 3915
Springhill Works
Springhill Road
Port Kembla NSW 2505

MATERIAL SAFETY DATA SHEET

Not classified as hazardous according to criteria of NOHSC

PRODUCT IDENTIFICATION

PRODUCT NAME: ZINCALUME[®] and GALVALUME[®] STRIP AND SHEET

UN NO:	None Allocated	D.G.CLASS:	None Allocated	CAS NO:	MIXTURE
HAZCHEM:	None Allocated	SUB. RISK:	None Allocated	PACK. GRP:	None Allocated

USE: Metal fabrication, roofing and wall cladding.

CORRECT SHIPPING NAME: Non Dangerous Good

OTHER NAMES: Zinc/Aluminium Coated Steel, Metallic Coated Steel, Hot Dipped Steel, Galvanised Iron

TRADENAMES.: This list may contain obsolete grades of steel that are no longer available.
BHPZAL 300(S) steel, BHPZAL 550(S) steel, GALVALUME[®]G2N steel,
GALVALUME[®]G2NS steel, GALVALUME[®]G250 steel, GALVALUME[®]G250S steel,
GALVALUME[®]G300 steel, GALVALUME[®]G300S steel, GALVALUME[®]G300H steel,
GALVALUME[®]G550 steel, GALVALUME[®]G550S steel, ZINCALUME[®]G2N steel,
ZINCALUME[®]G2NS steel, ZINCALUME[®]G250 steel, ZINCALUME[®]G250S steel,
ZINCALUME[®]G300 steel, ZINCALUME[®]G300H(S) steel, ZINCALUME[®]G300S steel,
ZINCALUME[®]G300SF steel, ZINCALUME[®]G400 steel, ZINCALUME[®]G450 steel,
ZINCALUME[®]G500 steel, ZINCALUME[®]G500S steel, ZINCALUME[®]G550 steel,
ZINCALUME[®]G550S steel, ZINCALUME[®]A792-50A(S) steel,
ZINCALUME[®]A792-50B(S) steel

INGREDIENTS: (Typical)

CHEMICAL ENTITY:	CAS NO:	PROPORTION:
Zinc	7440-66-6	1-10%
Aluminium	7429-90-5	1-10%
Iron	7439-89-6	Balance

Surface Treatments:

The surface of this product may have **low** levels of various combinations of the following chemicals present, resulting from the use of various types of anti-corrosion treatments.

CAS NO:	PROPORTION:
Hexavalent chromium compounds	<20 mg/m ²
Acrylic Resin	<1 g/m ²
Mineral oil	<300 mg/m ²

ZINCALUME® and GALVALUME® STRIP AND SHEET

PHYSICAL DESCRIPTION/PROPERTIES:

APPEARANCE: Thin coil or sheet with metallic silver appearance.

FORMULA: Low carbon steel strip with hot dipped zinc/aluminium alloy coating.

BOILING POINT: Not available

VAPOUR PRESSURE: Not applicable

SPECIFIC GRAVITY: 7.86

FLASH POINT: Not applicable

FLAMMABILITY LIMITS: Not applicable

OTHER PROPERTIES:

SOLUBILITY IN WATER: Insoluble.

HEALTH HAZARD INFORMATION

ACUTE EFFECTS:

SWALLOWED: Not expected to be swallowed in the form supplied.

EYE: Not irritating to eyes in the form supplied.

SKIN: Not irritating to skin in the form supplied. The surface oil used for corrosion protection may irritate the skin in sensitive individuals.

INHALED: Not expected to be inhaled in the form supplied. Welding or cutting operations that generate zinc oxide fume may lead to zinc or metal fume fever.

CHRONIC EFFECTS: No reports of effects from prolonged or repeated exposure to the product as supplied. PROLONGED SKIN CONTACT WITH CHROMIUM SURFACE TREATMENTS MAY LEAD TO CHROMIUM SENSITISATION IN SENSITIVE INDIVIDUALS. PROLONGED CONTACT WITH THE SURFACE OIL USED FOR CORROSION PROTECTION MAY IRRITATE THE SKIN IN SENSITIVE INDIVIDUALS.

FIRST AID:

SWALLOWED: It is unlikely that the product can be swallowed in the as supplied form.

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

If steel splinters enter the eye, obtain medical treatment immediately.

SKIN: It is unlikely that this product will cause irritation to the skin in the as supplied form.

Skin that has come in contact with oil or chromium surface treatments should be washed immediately with soap and water.

INHALED: It is unlikely that this product can be inhaled in the as supplied form. If exposed to zinc oxide fume remove to fresh air.

FIRST AID FACILITIES: Hand washing facilities.

ADVICE TO DOCTOR: Treat symptomatically. Patients usually recover from zinc fume fever in 36 hours.

TOXICITY DATA: No toxicity data is available in the literature for this product as supplied.

When rainwater goods manufactured from this product are tested to "AS/NZS 4020:1999 Products for use in contact with drinking water" the water meets the requirements of the Australian Drinking Water Guidelines.

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PRECAUTIONS FOR USE

EXPOSURE STANDARDS:

No exposure standard has been established for this product as supplied.

During welding or cutting operations the following NOHSC National Exposure Standards should be applied;

Zinc oxide fume	-	5 mg/m ³ TWA as Zn	10 mg/m ² STEL as Zn
Aluminium welding fumes	-	5 mg/m ³ TWA as Al	
Iron oxide fume	-	5 mg/m ³ TWA as Fe	
Oil Mist, refined mineral	-	5 mg/m ³ TWA	

Other Exposure Standards may apply during welding or cutting operations, but are determined by the type of welding or cutting process (ARC, MIG, TIG, gas or plasma) and the electrode(s) used. Each individual operation must be separately assessed for hazards by an experienced Occupational Hygienist.

ENGINEERING CONTROLS:

No special ventilation is required for the product as supplied.

For welding or cutting operations, local ventilation may be necessary to maintain the air concentration of fumes below the National Exposure Standards.

PERSONAL PROTECTION:

EYE PROTECTION: Goggles or safety glasses with side shields should be worn when working with this product.

HAND PROTECTION: Cut resistant or leather gloves should be worn when handling strip or sheet steel, to avoid cuts from splinters, burrs or sharp edges. A rubber dipped glove may be necessary to avoid skin contact with chromium surface treatments, if the surface is wet, or to avoid skin contact with surface oils, if present.

FLAMMABILITY: This material is not flammable or combustible.

ENVIRONMENT: This substance is not known to be hazardous to the environment.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT:

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Coils and sheet packs must be stored or stacked carefully to prevent movement. Stacks and single coils must be stable and properly chocked. Stow and secure adequately to prevent movement during transportation and storage. Store in a dry environment to prevent corrosion in storage. For more information on transporting this product, refer to the document 'Recommended Practices for Steel Coil and Sheet Storage and Stacking' available from BlueScope Steel sales offices.

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SPILLS AND DISPOSAL: No special procedures usually required. This product can be recycled.

FIRE/EXPLOSION HAZARD: The product as supplied is inert, but parts of the packaging are combustible. On burning they will emit carbon monoxide and other products of combustion.

REACTIVITY DATA: Coating can react with acids and alkalis, giving off hydrogen gas.

OTHER INFORMATION

Contact Points: Medical Centre, Western Port Works, Victoria - phone 03 5979 6121 (24 Hrs)
Medical Centre, Springhill Works, NSW - phone 02 4275 6000 (24 Hrs)

Manufacturers Advice:

This Material Safety Data Sheet (MSDS) summarises our best knowledge of the health and safety hazard information for the product and how to safely handle and use the product in the workplace.

Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace. Consideration should also be given to possible interactions when this product is used in conjunction with other manufacturers products.

GALVALUME® and ZINCALUME® are registered trade marks of BlueScope Steel Limited.

Prepared by: G. Brown, Senior Chemist

Issue no. 2, February 2003
replaces issue no. 1 of 12/10/98
This copy printed 1 October, 2003