



# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	COLORBOND® and COLORGRAIN® PREPAINTED STEEL STRIP AND SHEET AQUAPLATE® and HYDROPLATE® LAMINATED STEEL STRIP AND SHEET	
<b>Other Names</b>	This list may include obsolete grades of COLORBOND® that are no longer available. COLORGRAIN®, COLORBOND® Metallic, COLORBOND® Insulation Panel, COLORBOND® PERMAGARD® Antibacterial Insulated Panel, COLORBOND® APM, COLORBOND® HGA, COLORBOND® HGA (ABR), COLORBOND® GMA, COLORBOND® GMA (ABR), COLORBOND® POM, COLORBOND® SWP, COLORBOND® Ultra, COLORBOND® XFP, COLORBOND® XGD, COLORBOND® XMA, COLORBOND® XMA (ABR), COLORBOND® XRW, COLORBOND® Stainless IFS Pre-painted Steel, PKG Pre-painted Steel, XHW Pre-painted Steel, AQUAPLATE®, HYDROPLATE®, CORSTRIP®	
<b>Use</b>	COLORBOND® and COLORGRAIN® - metal fabrication, roofing and wall cladding. AQUAPLATE® - water tanks. HYDROPLATE® - pipes and culverts.	
<b>Supplier</b>	BlueScope Steel Limited Level 11, 120 Collins Street Melbourne, Vic. 3000 Australia Tel. +61 3 9666 4000 Fax +61 3 9666 4111	ABN 16 000 011 058
<b>Emergency Contact</b>	24 Hr. Emergency Contact Numbers	03 5979 6121 or 02 4275 6000

## 2. HAZARDS IDENTIFICATION

<b>Hazard Classification</b>	NON-HAZARDOUS SUBSTANCE according to the criteria of NOHSC NON-DANGEROUS GOOD according to the Australian Dangerous Goods Code.	
<b>Safety Phrases</b>	S22 Do not breathe dust S24 Avoid contact with skin S37 Wear suitable gloves	

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Low carbon steel strip with hot dipped zinc or zinc/aluminium coating and a painted or polymer surface.

Base Product	CAS no.	Proportion
Iron	7439-89-6	80 – 100%
Zinc	7440-66-6	1-10%
Aluminium	7429-90-5	1-10%

Surface Coatings	CAS no.	Proportion
This product can be coated with various combinations of :-		
Polyethylene film (CORSTRIP <sup>®</sup> )	9002-88-4	<200 µm film
Food Grade PVC film (AQUAPLATE <sup>®</sup> )	9002-86-2	<200 µm film
Polyolefin film (HYDROPLATE <sup>®</sup> )	9002-88-4	<200 µm film
polyester, siliconized polyester, alkyd, fluorocarbon(PVDF), epoxy, urethane, latex and acrylic paints and primers	Not Available	<50 µm film
Strontium Chromate (only present in primer layer)	7789-06-2	<10% of primer layer
Chromic Acid (pretreatment layer between metal and primer only)	1333-82-0	<30 mg/m <sup>2</sup> of surface

#### 4. FIRST AID MEASURES

<b>Ingestion</b>	It is unlikely that this product can be swallowed in the as supplied form. If exposed to fumes from welding operations, remove to fresh air
<b>Skin</b>	It is unlikely that this product will cause irritation to the skin in the as supplied form.
<b>Eyes</b>	It is unlikely that this product will enter the eye(s) in the as supplied form. If steel splinters enter the eye, obtain medical attention immediately.
<b>Inhalation</b>	It is unlikely that this product can be inhaled in the as supplied form.
<b>First aid Facilities</b>	Eyewash station and washroom.
<b>Advice to Doctor</b>	Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing** As appropriate for surrounding environment.

##### Media

**Hazards from Combustion Products** The surface coatings and some components of the packaging are combustible. On burning they will emit carbon monoxide and other products of combustion. PVC coatings can release Hydrogen Chloride when burnt. Polyurethane coatings can release hydrogen cyanide when burnt.

**Special Protective Equipment for Firefighters** Wear full protective clothing and self contained breathing apparatus (SCBA).

**Hazchem Code** None Allocated

#### 6. ACCIDENTAL RELEASE MEASURES

**Emergency Procedures** Coils and sheet packs should be picked up with suitable lifting equipment. Individual sheets should be handled with cut resistant gloves to avoid cuts.

#### 7. HANDLING AND STORAGE

**Precautions for Safe Handling** Observe recommendations for Exposure Controls/Personal Protection in Section 8.

**Conditions for Safe Storage** 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 storage. Store in a dry environment to prevent corrosion in storage. For more information on storing this product, refer to the document 'Recommended Practices for Steel Coil and Sheet Storage and Stacking' available from BlueScope Steel sales offices.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**National Exposure Standards** No exposure standard has been established for the product as supplied

Pre-painted steel should not be welded or cut with gas, plasma, electrical arc, etc., as operators may be exposed to thermally generated fumes. The decomposition products are not easily classifiable as to composition and are dependant upon the type of coating(s), the welding process (ARC, MIG or TIG, gas, plasma, etc.), the electrode(s) and the ventilation system employed (whether Local Exhaust or Dilution). An experienced Occupational Hygienist must separately assess each individual operation for possible hazards and operator exposures.

Pre-painted steel should not be sanded, ground, or otherwise abraded, in any operation that will penetrate the top surface coating and create airborne dust. Penetrating or removing the primer layer by sanding or grinding may release dust particles containing Strontium Chromate. STRONTIUM CHROMATE DUST IS A SUSPECTED CARCINOGEN AND MAY BE HARMFUL IF INHALED.

The NOHSC Exposure Standard for water insoluble Cr(VI) compounds of 0.05 mg/m<sup>3</sup> TWA as Cr, should not be exceeded (TWA = Time Weighted Average). An experienced Occupational Hygienist should separately assess each operation for possible hazards and operator exposures.

**Biological Limit Values** None allocated.

**Engineering Controls** No special ventilation is required for the product as supplied. If any dust or weld fume is generated, local filtered extraction should be used to maintain air concentrations below the relevant National Exposure Standards.

**Respiratory Protection** Not required for the product as supplied.

**Eye Protection** Goggles or safety glasses with side shields should be worn when working with this product. Refer to Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

**Hand Protection** Cut resistant gloves should be worn when handling strip or sheet steel, to avoid cuts from splinters, burrs or sharp edges. Refer to Australian Standard AS/NZS 13372161.1 Occupational Protective Gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Thin steel coil or sheet in various colours.
<b>Vapor Pressure</b>	Not Applicable
<b>Melting Point</b>	Not Applicable
<b>Boiling Point</b>	Not Applicable
<b>Specific Gravity</b>	7.86
<b>Flash Point</b>	Not Applicable
<b>Flammability</b>	Not Applicable
<b>Solubility</b>	Insoluble in water

## 10. STABILITY AND REACTIVITY

**Chemical Stability** Stable under normal conditions of use

**Conditions to Avoid** None known

**Incompatible Materials** Strong acids and Alkalis

**Hazardous Decomposition Products** Paint and polymer coatings are combustible and will emit carbon monoxide and other products of combustion when burnt or overheated.  
PVC coatings can release Hydrogen Chloride when burnt.  
Polyurethane coatings can release hydrogen cyanide when burnt.

**Hazardous Reactions** Metallic coating can react with strong acids and alkalis, giving off hydrogen gas.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation** Not expected to be inhaled in the form supplied. Welding or cutting operations can generate zinc fume from the coating, exposure to which may lead to Zinc Fume Fever and can also generate decomposition products from the paint.

**Ingestion** Not expected to be swallowed in the form supplied.

**Skin** Not irritating to skin in the form supplied.

**Eye** Not irritating to eyes in the form supplied.

**Chronic Effects** No reports of effects from prolonged or repeated exposure to the product as supplied.

**Other information** No toxicity data is available in the literature for this product as supplied.

When rainwater goods manufactured from this product were tested to "AS/NZS 4020:2002 Products for use in contact with drinking water" the water meets the requirements of the Australian Drinking Water Guidelines.

## 12. Ecological Information

**Ecotoxicity** No data is available for this material as supplied.

**Persistence and Degradability** No data is available for this material as supplied.

**Mobility** No data is available for this material as supplied.

## 13. DISPOSAL CONSIDERATIONS

This product can be recycled. If not recycled, dispose of waste according to relevant local, State and Federal regulations.

#### 14. TRANSPORT INFORMATION

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. 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.

#### 15. REGULATORY INFORMATION

**SUSDP Poison Schedule** No Poison Schedule Allocated

**REACH(EC) 1907/2006** Article 7(1) - Not Applicable  
Article 7(2) - Not Applicable (AQUAPLATE<sup>®</sup> Steel excepted)

#### 16. OTHER INFORMATION

##### Manufacturers Advice

This Material Safety Data Sheet (MSDS) summarizes 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.

AQUAPLATE<sup>®</sup>, COLORBOND<sup>®</sup>, COLORGRAIN<sup>®</sup>, HYDROPLATE<sup>®</sup>, CORSTRIP<sup>®</sup> and PERMAGARD<sup>®</sup> are registered trade marks of BlueScope Steel Limited.

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