



Prepainted Steel Strip and Sheet

ACCORDING TO THE OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELLING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATIONS 2013 (CLASS REGULATIONS)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Prepainted Steel Strip and Sheet
Trade Mark	Clean COLORBOND®, COLORBOND®, ELEMENTS®, VERMOE®, PRIMAMAJU®, BlueScope ZACS® (Cool / Natural) and LUMBA®, P-ZACS®
CAS No.	Not applicable.

1.2 Other means of identification

Product code	None.
Alternative names	None.
Synonyms	None.

1.3 Recommended use of the chemical and restrictions on use

Identified Use(s)	Roofing, wall cladding, gutters, downpipes, fascia, cool room panels, fencing, garage doors and metal fabrication.
Uses Advised Against	Not known.

1.4 Details of principal suppliers

Company Identification	NS BlueScope Malaysia Sdn. Bhd.
Company Registration number	199101012824 (223136-P)
Address	Lot 1551, Jalan Bukit Kapar, 42200 Kapar, Selangor Darul Ehsan, Malaysia.
Telephone	(603) 3361 6888

1.5 Emergency telephone number

Company	(603) 3361 6888 (24 hour(s))
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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations)	Not classified as dangerous for supply/use.
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2.2 Label elements

Product Name	Prepainted Steel Strip and Sheet
Hazard Pictogram(s)	Not applicable.
Signal Word(s)	Not applicable.
Hazard Statement(s)	Not applicable.
Precautionary Statement(s)	P260: Do not breathe dust. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Additional Information	Avoid contact with skin.

2.3 Other hazards which do not result in classification

Sharp edges may cause injury.
Industrial processes such as grinding or welding can generate dust or fume from this product, which can be hazardous if inhaled.

2.4 Additional Information

None.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Steel strip with an aluminium/zinc alloy coating and a pre-painted surface.

3.1 Substances

Not applicable.

3.2 Mixtures

Base Metal				
Ingredients	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Steel	12597-69-2	100	Not classified	None
Metallic coating				
Ingredients	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Aluminium Zinc Coating	-	150-200 g/m ² total both sides	Not classified	None
Aluminium	7429-90-5	50-60	Not classified	None
Zinc	7440-66-6	Balance	Not classified	None
Silicon	7440-21-3	1-2	Not classified	None
Chemical treatment				
Ingredients	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Hexavalent chromium compounds	Mixture	Max. 30 mg/m ² per side	Not classified	None
Painted Finish				
Ingredients	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Primer: Strontium chromate (contains <5% chromium in dry film)	7789-06-2	<20% of primer layer ~5 micron per side	Acute Tox. 4 H302 Carc. 1B H350 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS08 GHS07 GHS09
Top/backing coat: Various paint systems (polyester, fluorocarbon (PVDF), epoxy and polyurethane)	Mixture	5 – 25 micron per side	Not classified	None
Surface treatment				
Clean COLORBOND® steel has a proprietary surface treatment containing non-hazardous ingredients.				

SECTION 4: FIRST AID MEASURES

Product as supplied: Unlikely route of exposure to inhalation, ingestion and eye contact. The exposure to dust is possible during grinding and welding of product (processing on metal).

4.1 Description of first aid measures

Inhalation	Unlikely route of exposure. If exposed to fumes from welding operations, remove to fresh air.
Skin Contact	It is unlikely that the product will cause irritation to the skin in the supplied form. Wash skin with soap and water.
Eye Contact	Processing on metal: If steel splinters enter the eye, obtain medical attention immediately.
Ingestion	Unlikely route of exposure.

4.2 Most important symptoms/effects, acute and delayed

None anticipated.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No special requirements.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	Do not use water.

5.2 Special hazards arising from the chemical

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

Base metal is non-combustible. However, under fire conditions, material may decompose and/or burn. Some parts of the packaging are combustible.

5.3 Special protective equipment and precautions for fire fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Coils and sheet packs should be picked up with suitable lifting equipment. Individual sheets should be handled with the appropriate gloves to avoid cuts.

6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

6.3 Methods and material for containment and cleaning up

Collect mechanically and dispose of according to Section 13.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Product is expected to be formed, fastened and cut. Product should not be welded or sanded. Product should be picked up with suitable lifting equipment. Wear appropriate gloves to avoid cuts when handling. Sanding or grinding to expose or remove the primer layer may release particles containing strontium chromate, therefore such actions should be avoided to prevent the creation of airborne dust. Maintain high standards of personal hygiene i.e., washing hands prior to eating, drinking, smoking or using toilet facilities.

Processing on metal: Provide adequate ventilation. Avoid inhalation of high concentrations of dusts. Use personal protective equipment as required. See Also Section 8.

7.2 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. 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 office and website.

Storage temperature	Store in a dry environment to prevent corrosion in storage.
Storage life	Stable under normal conditions.
Incompatible materials	Strong acids, strong alkalis



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Substance	CAS No.	LTTEL (8 hr TWA ppm)	LTTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Aluminium	7429-90-5		10			Metal dust
			5			Pyro powders, as Al
			5			Welding fumes, as Al
Strontium Chromate	7789-06-2		0.0005			
Silicon	7440-21-3		10			
Chromium, metals and inorganic compounds, as Cr: Cr VI compounds, water-soluble, TTS			0.05			
Chromium, metals and inorganic compounds, as Cr: Cr VI compounds, water insoluble, TTS			0.01			

Source: Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000, Malaysia.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with good general ventilation. No special ventilation is required for the product as supplied. Pre-painted steel should not be sanded, ground or otherwise abraded, in any operation that will penetrate the 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 is classified as a Category 1B carcinogen (presumed to have carcinogenic potential for humans) according to Industry Code of Practice (ICOP) on Chemical Classification and Hazard Communication (Amendment) 2019 Part 1. For processing operations that generate dust or fumes, the use of engineering controls may be necessary to maintain air concentrations below the relevant exposure standards.

8.2.2. Individual protection measures, such as personal protective equipment



Eye Protection

Not normally required.

Processing on metal: Wear protective eyewear (goggles, face shield, or safety glasses). Final choice of appropriate eye/face protection will vary according to individual circumstances



Skin protection

Wear protective gloves.

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. Final choice of appropriate gloves will vary according to individual circumstances and according to risk assessments undertaken.

Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection

Normally no personal respiratory protection is necessary.

Processing on metal: An approved dust mask should be worn. In case of high airborne concentrations, wear suitable positive pressure respiratory protection equipment.



Thermal hazards

Not applicable.

8.2.3. Environmental Exposure Controls Do not release large quantities into the surface water or into drains.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Thin steel coil or sheet in various colours.
Odour	Not applicable.
Odour threshold	Not applicable.
pH	Not applicable.
Melting Point (°C)	Approximately 1500°C for base steel. Approximately 600°C for metal coating.
Initial boiling point and boiling range	Not applicable.
Flash Point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-combustible.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Specific Gravity	7.85
Solubility	Solubility (Water) : Insoluble. Solubility (Other) : Soluble in acids and the coating is also soluble in strong alkali.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature (°C)	Not available.
Viscosity	Not applicable.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions of use.
Refer to Section 10.3

10.2 Chemical Stability

Stable under normal conditions of storage and handling.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

None anticipated when used as intended.

10.5 Incompatible materials

Strong acids, strong alkalis

10.6 Hazardous decomposition products

When burnt or overheated the product and packaging are combustible and may emit carbon monoxide, metallic oxides and other products of combustion whilst the base metal and metallic coating may release metallic oxides.



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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Product as supplied: Unlikely route of exposure.
Acute toxicity - Skin Contact	Low acute toxicity.
Acute toxicity - Inhalation	Product as supplied: Unlikely route of exposure. Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.
Skin corrosion/irritation	Product as supplied: Not classified. It is unlikely that this product will cause irritation to the skin in the supplied form.
Serious eye damage/irritation	Product as supplied: Non-irritant. Processing on metal: Dust may have irritant effect on eyes.
Skin sensitization data	It is not a skin sensitiser.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	No evidence of mutagenic effects.
Carcinogenicity	No evidence of carcinogenicity. Penetrating or removing the primer layer by sanding or grinding may release dust particles containing strontium chromate. Strontium chromate is classified as a Category 1B carcinogen (suspected to have carcinogenic potential for humans)
Reproductive toxicity	No evidence of reproductive effects.
Lactation	Not classified.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

None anticipated.

11.3 Delayed and immediate effects and also chronic affects from short and long term exposure

Treat symptomatically.

11.4 Numerical measures of toxicity (such as acute toxicity estimates)

Ingestion : Not classified.

Skin Contact : Not classified.

Inhalation : Not classified.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	No ecological data is available for this material.

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No information on this formulation.

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Method

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

SECTION 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

14.1 UN number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing Group, if applicable

Not applicable

14.5 Environmental hazards

Not classified as a Marine Pollutant.

14.6 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

14.7 Special precautions for user

Not known



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SECTION 15: REGULATORY INFORMATION

This SDS has been prepared in accordance to The Industry Code of Practice on Chemical Classification and Hazard Communication 2019 (ICOP - Part 1) and The Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations).

15.1 Safety, health and environmental regulations specific for the product in question

Part 1 List of Classified Chemical, ICOP 7789-06-2

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:	1-16
Date of preparation	20/06/2022
Date of revision	-
LEGEND	
Hazard Pictogram(s)	GHS07: GHS: Exclamation mark GHS08: GHS: Health hazard GHS09: GHS: Environment
Hazard classification	Acute Tox. 4 : Acute toxicity, Category 4 Carc. 1B : Carcinogenicity, Category 1B Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1 Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1
Hazard Statement(s)	H302: Harmful if swallowed. H350: May cause cancer. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Acronyms	CAS : Chemical Abstracts Service LTEL : Long term exposure limit STEL : Short term exposure limit STOT : Specific Target Organ Toxicity
Other information deems necessary by a supplier	None.
Key literature references and sources for data used to compile the SDS	Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS Regulations) Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000, Malaysia.
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