1. IDENTIFICATION

GHS Product Identifier
HOT ROLLED STEEL PLATE, 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
Metal fabrication and manufacturing

Other Names

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes Analysis (or Chemistry, Carbon), Formability, Hardness and Structural (or Strength) Grades and Primed Plate.</td>
<td></td>
</tr>
<tr>
<td>BRIGHTFORM® steel, XLERPLATE® steel, EMBAR™ steel, TRU-SPEC® Coil Plate steel, TUBEFORM® steel and XTRAFORM® steel</td>
<td></td>
</tr>
</tbody>
</table>

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.
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 plate, strip and sheet products. Steel plate is available with primer on both sides.

Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Metal - All Products</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Steel</td>
<td>12597-69-2</td>
<td>100 %</td>
</tr>
<tr>
<td>Primed plate only:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc - Si Rich Primer</td>
<td></td>
<td>20 micron per side</td>
</tr>
<tr>
<td>Surface Treatment (if any)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpickled products only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Scale - Iron Oxides</td>
<td></td>
<td>Mixture of iron oxide 100 %</td>
</tr>
<tr>
<td>Pickled and Oiled product only</td>
<td></td>
<td>Mixture 1500mg/m2 Total both sides</td>
</tr>
</tbody>
</table>

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

Specific Hazards Arising From The Chemical
When burnt or overheated the product and packaging may release combustion products including carbon monoxide and metallic oxides.
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 undergo significant post processing including forming, welding, grinding, blasting, galvanising, painting etc. Product should be picked up with suitable lifting equipment. Wear appropriate gloves to avoid cuts when handling.

If welding primed plate 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 ‘Guidelines for storage and handling BlueScope products’ available from BlueScope 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.
Iron oxide (fume): 5 mg/m³ TWA
Zinc oxide (fume): 5 mg/m³ TWA; 10 mg/m³ STEL

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Steel plate coil or sheet with grey or red appearance</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Decomposition Temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>Base metal: 1500°C (approximate)</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Solubility in Water</strong></td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>7.85</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapour Pressure</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapour Density (Air=1)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Odour Threshold</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Partition Coefficient: n-octanol/water</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability</strong></td>
<td>Non combustible material.</td>
</tr>
<tr>
<td><strong>Auto-Ignition Temperature</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Explosion Limit - Upper</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Explosion Limit - Lower</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Kinematic Viscosity</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Dynamic Viscosity</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
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 primed plate 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.

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.
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

IATA/ICAO Packing Group
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). Manufactured in accordance with Part 2, Section 7, Appendix I, Paints or Tinters, of the SUSMP

16. OTHER INFORMATION

Date of preparation or last revision of SDS
SDS amendment: January 2018
1. Identification
SDS Reviewed: August 2015 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, Safe work Australia.
American Conference of Industrial Hygienists (ACGIH)
Globally Harmonised System of Classification and Labelling of Chemicals.

Other Information
BRIGHTFORM® steel, XLERPLATE® steel, TRU-SPEC® Coil Plate steel, TUBEFORM® steel and XTRAFORM® steel are registered trademark of BlueScope Steel Limited.

END OF SDS