Material Safety Data Sheet

| Next Alur | t Generat minium/z: | tion ZINCALUME® sinc/magnesium al. | steel with loy coated | Activate™ steel stri | technology; p and sheet |
|--|--|---|---|---|--|
| Infosafe No. | LPV4N | Version No. 4.1 | ISSUED Dat | e March 2013 | Status ISSUED by BSLAUS |
| | 1. IDENTI | FICATION OF THE MATER: | IAL AND SUPPLI | ER | |
| Product Name Next Generation ZIN | CALUME® steel wi | th Activate™ technology; Alumini | um/zinc/magnesium all | loy coated steel strip | and sheet |
| Company Name BlueScope Steel Lim | ited (ABN 16 000 | 011 058) | | | |
| Address Level 11, 120 Collin VIC 3000 Australia | ns St Melbourne | | | | |
| Emergency Tel. 02 4275 7522 (24h) | | | | | |
| Telephone/Fax Numl Telephone: 18008007 | ber 89 (Australia On | ly) | | | |
| Email steeldirect@bluescop | pesteel.com | | | | |
| Recommended Use Metal fabrication, | roofing and wall | cladding | | | |
| Other Names | Name Next Generat: AMFGM; Alumin sheet | ion ZINCALUME© steel with Act iium/zinc/magnesium alloy coa | ivate™ technology, ted steel strip and | 1 | |
| | 2. HAZARD | S IDENTIFICATION | | | |
| Hazard Classifica Not classified as H. Not classified as D. | tion azardous accordi angerous Goods a | ng to criteria of National Occup ccording to the Australian Code | ational Health & Safe for the Transport of | ety Commission (NOHSC) Dangerous Goods by Ro | , Australia. ad and Rail. (7th edition) |
| Safety Phrase(s) S22 Do not breathe of S24 Avoid contact w. S37 Wear suitable g. S41 In case of fire | dust. ith skin. loves. and/or explosio: | n do not breathe fumes. | | | |
| | 3. COMPOS | ITION/INFORMATION ON 3 | INGREDIENTS | | |
| Information on Con Steel strip with a 1 | nposition hot dipped alumi | nium zinc magnesium alloy coatin | g. | | |
| Ingredients | | | | | |
| Name | | CAS | | | Proportion |
| Base Metal Steel | | 12597-69-2 | 2 | | 100 % |
| | | | | | |
| Metallic Coating Aluminium Zinc Ma | gnesium Coating | 1 | | | 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 | ound | | | | 70-00 mg/m2 nor of to |
| Acrylic resin - n | o hazardone mot | erials | | | 10.20 md/ms het side |
| Oiled Products on Corrosion inhibit | ly: ing oil | Mixture | | | 1500mg/m2 total both sides |

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.

 $\ensuremath{\textbf{Ingestion}}$ 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.

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

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.

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 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

exposure standards have been established for this material, however, the TWA exposure standards for dust not otherwise specified is 10 mg/m³

Aluminium (Metal dust): 5 mg/m3 TWA

Aluminium (metal dusc), 5 mg/m 1WA Iron oxide (fume): 5 mg/m³ TWA Magnesium oxide (fume): 10 mg/m³ TWA Zinc oxide (fume): 5 mg/m³ TWA; 10 mg/m³ STEL

Chromium III Compounds: 0.5 mg/m³ 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

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

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.

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) No applicabl

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

10. STABILITY AND REACTIVITY

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.

11. TOXICOLOGICAL INFORMATION

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

Innalation 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

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.

12. ECOLOGICAL INFORMATION

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.

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.

IMDG Marine Pollutant

15. REGULATORY INFORMATION

Regulatory Information

NegLiaCofy 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 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

16. OTHER INFORMATION

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

 $\tt ZINCALUME@$ steel is a registered trademark of BlueScope Steel Limited. Activate^ technology is a trademark of BlueScope Steel Limited.

End of MSDS

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