1. Identification of Substance & Company

Product
Product name: James Hardie™ Top Coat
Product code: NA
UN number: NA
Proper Shipping Name: NA
Packaging group: NA
Hazchem code: 1T (recommended)
Uses: Top coat

Company Details
Company: James Hardie Research Pty Limited
Address: 10 Colquhoun Street
Rosehill
NSW
2142
Australia

Telephone: 13 11 03

Emergency Telephone Number: 13 11 03 (AU) and 0800 808 868 (NZ)

2. Hazard Identification

Hazard classification for Australia (GHS)
This product has been assessed according to GHS and is classified as follows:

<table>
<thead>
<tr>
<th>GHS category</th>
<th>Hazard Code</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye irritation</td>
<td>Cat 2A</td>
<td>H319</td>
</tr>
</tbody>
</table>

SYMBOLS

WARNING

Other Classifications
There are no other Classifications that are known to apply.

Precautionary Statements
Prevention
P264 Wash hands thoroughly after handling.
P280 Wear eye/face protection.

Response
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS/ Identification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>30-60%</td>
</tr>
<tr>
<td>Ammonia, aqueous solution</td>
<td>1336-21-6</td>
<td>trace</td>
</tr>
<tr>
<td>Ingredients determined not to be hazardous</td>
<td>proprietary</td>
<td>balance</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.
4. First Aid

General Information
If medical advice is needed, have product container or label at hand. You should call the Poisons Information Centre if you feel that you may have been harmed or irritated by this product. The number is 13 11 26 (AU) and 0800 764 766 (NZ) (24 hr, 7 days a week emergency service).

Recommended first aid facilities
Ready access to running water is recommended.

Exposure
Swallowed
Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact
This product is non-irritating to skin. No further measures should be required.

Inhaled
If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor
Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:
There are no specific risks for fire/explosion for this chemical. It is not classed as flammable.

Suitable extinguishing substances:
Carbon dioxide, extinguishing powder, foam, fog sprays, water jets.

Unsuitable extinguishing substances:
Unknown.

Products of combustion:
Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment:
No special measures are required.

Hazchem code:
1T (recommended)

6. Accidental Release Measures

Emergency procedures
If a significant spill (>100L) occurs:
Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

Clean-up method
Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create environmental hazard.

Disposal
Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

Precautions
Can be slippery on floors. Wear protective equipment (see section 8)

7. Storage & Handling

Storage
Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.

Handling
Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.
8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards
An Exposure Standard (ES) for the mixture has not been established. Below are the exposure standards for the ingredients that are listed in the NOHSC: 1003.

<table>
<thead>
<tr>
<th>NOHSC (NOHSC:1003)</th>
<th>Ingredient</th>
<th>WES-TWA</th>
<th>WES-STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Calcium Carbonate</td>
<td>10mg/m³</td>
<td>data unavailable</td>
</tr>
<tr>
<td></td>
<td>Ammonia</td>
<td>25ppm, 17mg/m³</td>
<td>35ppm, 24mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls
In industrial situations, concentration values below the ES value must be maintained. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe airborne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes
Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible.

Skin
If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. PVC gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use.

Respiratory
A respirator when airborne concentrations approach the WES (section 8). Use a respirator with a dust mist cartridge. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information
Not applicable

9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>light pink paste</td>
</tr>
<tr>
<td>Odour</td>
<td>faint ammonia</td>
</tr>
<tr>
<td>pH</td>
<td>no data</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>no data</td>
</tr>
<tr>
<td>Viscosity</td>
<td>no data</td>
</tr>
<tr>
<td>Boiling point</td>
<td>no data</td>
</tr>
<tr>
<td>Volatile materials</td>
<td>no data</td>
</tr>
<tr>
<td>Freezing / melting point</td>
<td>no data</td>
</tr>
<tr>
<td>Solubility</td>
<td>miscible</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1.65</td>
</tr>
<tr>
<td>Flash point</td>
<td>non flammable</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>no data</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>no data</td>
</tr>
<tr>
<td>Upper &amp; lower flammable limits</td>
<td>no data</td>
</tr>
<tr>
<td>Corrosiveness</td>
<td>no data</td>
</tr>
</tbody>
</table>

10. Stability & Reactivity

Stability
Stable

Conditions to be avoided
Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.

Incompatible groups
none known

Substance Specific
none known

Incompatibility
none known

Hazardous decomposition products
none known

Hazardous reactions
none known
11. Toxicological Information

Summary
IF IN EYES: dust from this product may cause eye irritation.
IF INHALED: dust may cause respiratory irritation in high concentrations. This is due to mechanical irritation of the dust.
IF ON SKIN: if left on skin for a long time it may cause skin to dry out.

Supporting Data

Acute
Oral
Using LD$_{50}$'s for ingredients, the calculated LD$_{50}$ (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: Calcium Carbonate 6450mg/kg (rat), Ammonia, aqueous solution 350 - 370 mg/kg (rat).

Dermal
No evidence of dermal toxicity.

Inhaled
No evidence of inhalation toxicity, however dust from this product may be irritating to the respiratory tract (mechanical irritation).

Eye
The mixture is considered to be an eye irritant. Calcium carbonate is considered an eye irritant by EPA (NZ).

Skin
The mixture is not considered to be irritating to the skin.

Chronic
Sensitisation
No ingredient present at concentrations > 0.1% is considered a sensitizer.

Mutagenicity
No ingredient present at concentrations > 0.1% is considered a mutagen.

Carcinogenicity
No ingredient present at concentrations > 0.1% is considered a carcinogen.

Reproductive / Developmental
No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.

Systemic
Aggravation of existing conditions
None known.

12. Ecological Data

Summary
This mixture is not considered to be ecotoxic. However, do not discharge into sewer or waterways.

Supporting Data

Aquatic
Using EC$_{50}$'s for ingredients, the calculated EC$_{50}$ for the mixture is > 100 mg/L. Data considered includes: Calcium carbonate: >56000mg/L (96h, fish)), >14mg/L (72h, algae) Ammonia, aqueous solution 0.45 mg/l (96hr) Coho salmon, 0.66 mg/l (48hr) Daphnia magna.

Bioaccumulation
No evidence of bioaccumulation.

Degradability
No data

Soil
No evidence of soil toxicity.

Biocidal
no data

13. Disposal Considerations

Restrictions
There are no product-specific restrictions. However, state and local disposal regulations may apply. Note that state and local disposal regulations may differ from federal disposal regulations.

Disposal method
Disposal of this product must comply with the requirements of state and local disposal regulations. The substance must be handled as hazardous waste and disposed of in an approved facility.

Contaminated packaging
Dispose of empty containers safely. Do not re-use containers for any other purpose.

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

UN number: NA
Class(es): NA
Proper shipping name: NA
Packing group: NA
Hazchem code: 1T (recommended)
15. Regulatory Information

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)
Applicable prohibitions and notifications/licensing requirements
Agricultural and Veterinary Chemicals Act

<table>
<thead>
<tr>
<th>Listing in the Australian Inventory of Chemical Substances (AICS)</th>
<th>Additional Information</th>
<th>GHS Hazardous Chemical Information List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td>High Volume Industrial Chemicals List (HVICL)</td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>Hazardous Substance</td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td>Calcium carbonate</td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>not listed</td>
<td></td>
</tr>
<tr>
<td>Not listed</td>
<td>Skin corrosion – category 1B</td>
<td></td>
</tr>
<tr>
<td>Hazardous to the aquatic environment (acute) – category 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Other Information

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
<tr>
<td>CAS Number</td>
<td>Unique Chemical Abstracts Service Registry Number</td>
</tr>
<tr>
<td>ECso</td>
<td>Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)</td>
</tr>
<tr>
<td>ES</td>
<td>Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day.</td>
</tr>
<tr>
<td>GESTIS</td>
<td>Database on Hazardous substances, Information system on hazardous substances of the German Social Accident Insurance.</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonised System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>HAZCHEM Code</td>
<td>Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>LEL</td>
<td>Lower Explosive Limit</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)</td>
</tr>
<tr>
<td>NICNAS</td>
<td>National Industrial Chemicals Notification and Assessment Scheme</td>
</tr>
<tr>
<td>NZ EPA CCID</td>
<td>New Zealand Environmental Protection Agency. Chemical Classification Information Database.</td>
</tr>
<tr>
<td>Peak Limitation</td>
<td>Peak Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded</td>
</tr>
<tr>
<td>STOT</td>
<td>Specific Target Organ Toxicity</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average – generally referred to ES averaged over typical work day (usually 8 hours)</td>
</tr>
<tr>
<td>UEL</td>
<td>Upper Explosive Limit</td>
</tr>
<tr>
<td>UN Number</td>
<td>United Nations Number</td>
</tr>
</tbody>
</table>
References

Data

NOHSC: 1003

Other References:
Suppliers SDS

Review

Date
November 2016

Reason for review
Not applicable – new SDS

Disclaimer
This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is prepared in accordance with the Code of Practice for “Preparation of Safety Sheets for hazardous Chemicals” December 2011 in accordance with WHS regulations. This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose.

To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.