1. Identification of Substance & Company

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

GHS category	Hazard Code	Hazard Statements
Eye irritation Cat 1	H318	Causes serious eye damage.
Skin irritation cat 2	H315	Causes skin irritation.
STOT SE cat 3 (respiratory tract irritation)	H335	May cause respiratory irritation.

SYMBOLS

WARNING

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Prevention

P261	Avoid breathing dust.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye 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.
P310	Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/ national Regulations.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Concentration
Calcium Carbonate	471-34-1	60-90%
Portland Cement	65997-15-1	10-30%
Ingredients determined not to be hazardous	proprietary	balance

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 National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

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. Immediately call a POISON CENTER or doctor/physician.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

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.

NOHSC (NOHSC:1003)	Ingredient	WES-TWA	WES-STEL
	Calcium Carbonate	10mg/m^3	data unavailable
	Portland cement	10mg/m^{3*}	

This value is for inspirable dust containing no asbestos and less than 1% crystalline silica.

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. It is recommended that contact lenses are not worn while working with this product.

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 If sanding, sawing or grinding dried coating use a dust mask. 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

Appearance	free flowing paste
Odour	cementitious
pH	no data
Vapour pressure	no data
Viscosity	no data
Boiling point	no data
Volatile materials	no data
Freezing / melting point	no data
Solubility	miscible
Specific gravity / density	1.7
Flash point	non flammable
Danger of explosion	no data
Auto-ignition temperature	no data
Upper & lower flammable limits	no data
Corrosiveness	no data

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Store in a cool, dry, well-ventilated area.
Substance Specific Incompatibility	Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid reaction with oxidising agents.
Hazardous decomposition products	none known
Hazardous reactions	none known

11. Toxicological Information

Summary

IF IN EYES. may cause serious eye damage.
IF INHALED: may cause respiratory irritation in high concentrations.
IF ON SKIN: may cause skin irritation.

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),
	Dermal	No evidence of dermal toxicity.
	Inhaled	No evidence of inhalation toxicity, however this product may be irritating to the respiratory tract (STOT SE cat 3).
	Eye	The mixture is considered to be an eye corrosive. Portland cement is an eye corrosive
	Skin	The mixture is considered to be irritating to the skin. Portland cement is a skin irritant.
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	This mixture is a respiratory tract irritant.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This mixture is not considered to be ecotoxic.

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),
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	**Proper shipping name:**	NA
Class(es)	NA	**Packing group:**	NA
Precautions:	Not applicable.	**Hazchem code:**	1T (recommended)

15. Regulatory Information

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)	Not listed	
Applicable prohibitions and notifications/licensing requirements	Not listed	
Agricultural and Veterinary Chemicals Act	Not listed	
Listing in the Australian Inventory of Chemical Substances (AICS)	Calcium carbonate	High Volume Industrial Chemicals List (HVICL)
	Portland Cement	High Volume Industrial Chemicals List (HVICL)
Additional information	Not applicable	
GHS Hazardous Chemical Information List	Calcium carbonate	not listed
	Portland Cement	not listed

16. Other Information

Abbreviations	
AICS	Australian Inventory of Chemical Substances
CAS Number	Unique Chemical Abstracts Service Registry Number
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ES	Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day.
GESTIS	Database on Hazardous substances, Information system on hazardous substances of the German Social Accident Insurance.
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSIS	Hazardous substance Information System, http://hsis.safeworkaustralia.gov.au/
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
NICNAS	National Industrial Chemicals Notification and Assessment Scheme
NZ EPA CCID	New Zealand Environmental Protection Agency. Chemical Classification Information Database.
Peak Limitation	Peak Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
SDS	Safety Data Sheet
STEL	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
STOT	Specific Target Organ Toxicity
TWA	Time Weighted Average – generally referred to ES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number

References

Data	Unless otherwise stated comes from Hazardous Substances Information System (HSIS) for the specific chemical.
NOHSC: 1003	National Occupational Health and Safety Commission 1995, *Exposure Standards for Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]*
Other References:	Suppliers SDS

Review

Date	**Reason for review**
November 2016	Not applicable – new SDS

Disclaimer

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