SAFETY DATA SHEET

HARDIE™ TOP COAT

Infosafe No.: GEN3J
Version No.: 1.1
ISSUED Date : 27/07/2021
ISSUED by: James Hardie New Zealand Limited

Section 1: Identification

Product Identifier
HARDIE™ TOP COAT

Company Name
James Hardie New Zealand Limited

Address
1 O'Rorke Road Penrose
Auckland 1061 NEW ZEALAND

Telephone/Fax Number
Telephone: 0800 808 868

Emergency Phone Number
0800 154 666

Recommended uses and any restrictions on use or supply
Use according to manufacturer's directions.
Finishing coating with Hardie™ Base Coat.

Section 2: Hazard identification

GHS classification of the substance/mixture
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017, New Zealand.
Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.
6.1E (respiratory tract irritant) Specific target organ toxicity (single exposure) Category 3 - Substances that are acutely toxic
6.3A Substance that is irritating to the skin
6.4A Substance that is irritating to the eyes

Signal Word (s)
WARNING

Hazard Statement (s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Pictogram (s)
Exclamation mark

Precautionary Statement – Prevention
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280d Wear protective gloves.
P280e Wear eye protection/face protection.

Precautionary Statement – Response
P312 Call a POISON CENTER/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
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.

Precautionary Statement – Storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

Other Information
Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

Ingredients

Name	CAS	Proportion
Calcium carbonate	471-34-1	30-60 %
Ammonia, aqueous solution	1336-21-6	Trace
Ingredients determined not to be hazardous		Balance

Other Information
Calcium carbonate
Alternative CAS number: 1317-65-3, 13397-26-7, 146358-95-4, 15634-14-7, 198352-33-9, 459411-10-0, 471-34-1, 63660-97-9, 72608-12-9, 878759-26-3.

Section 4: First-aid measures

Inhalation
If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion
Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin
Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First-aid Facilities
Eyewash, safety shower 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. (0800 764 766)

Section 5: Fire-fighting measures

Suitable Extinguishing Media
Use appropriate fire extinguisher for surrounding environment.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific hazards arising from the chemical
This product is non combustible. However heating can cause expansion or decomposition leading to violent rupture of containers.

Decomposition Temperature
Not available

Precautions in connection with fire
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. Avoid contact with incompatible materials. This product should be prevented from entering drains and watercourses.
DO NOT approach containers suspected to be hot.

SECTION 6: Accidental release measures

Emergency Procedures
Wear appropriate personal protective equipment and clothing to prevent exposure. Increase ventilation. Keep people away from and upwind of spill/leak. Clean up immediately. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Prevent this material entering waterways, drains and sewers. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for Safe Handling
Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Keep separated from foodstuffs. Prevent the build up of mists or vapours in the work atmosphere. Do not enter area without respiratory protection or until the atmosphere has been checked. Prevent concentration in hollows and sumps. 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
Store in a cool, dry, well-ventilated area, out of direct sunlight. Keep only in original container. Do not store in unlabelled containers. Keep containers tightly closed. Store away from incompatible materials. Keep away from food, drink and animal feeding stuffs. Ensure that storage conditions comply with applicable local and national regulations.

Recommended Materials
Polyethylene or polypropylene container.
Packing as recommended by manufacturer.
Check all containers are clearly labelled and free from leaks.

SECTION 8: Exposure controls/personal protection

Occupational Exposure Limits (OEL)

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Calcium carbonate	NZ OELs List	TWA	10	mg/m3	
Ammonia, aqueous solution	NZ OELs List	TWA	25	ppm	Ammonia, Anhydrous
Ammonia, aqueous solution	NZ OELs List	TWA	17	mg/m3	Ammonia, Anhydrous
Ammonia, aqueous solution	NZ OELs List	STEL	35	ppm	Ammonia, Anhydrous
Ammonia, aqueous solution	NZ OELs List	STEL	24	mg/m3	Ammonia, Anhydrous

Biological Limit Values
No biological limits allocated.

Appropriate Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable mist/dust filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
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 (series) - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as PVC. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.
Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Footwear
Wear safety footwear. Final choice will vary according to individual circumstances.
Recommended Materials: Rubber

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.
Recommended Materials: PVC

SECTION 9: Physical and chemical properties

Properties	Description	Properties	Description
Form	Paste	**Appearance**	Free flowing, light pink paste
Colour	Light pink	**Odour**	Faint ammonia odour
Decomposition Temperature	Not available	**Melting Point**	Not available
Boiling Point	Not available	**Solubility in Water**	Miscible
Specific Gravity	1.65 (water = 1)	**pH**	Not available
Vapour Pressure	Not available	**Vapour Density (Air=1)**	Not available
Evaporation Rate	Not available	**Odour Threshold**	Not available
Viscosity	Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity	**Partition Coefficient: n-octanol/water**	Not available
Flash Point	Not applicable	**Flammability**	Not flammable
Auto-Ignition Temperature	Not available	**Flammable Limits - Lower**	Not applicable
Flammable Limits - Upper	Not applicable	**Explosion Properties**	Not available
Oxidising Properties	Not available	**Kinematic Viscosity**	Not available
Dynamic Viscosity	Not available		

SECTION 10: Stability and reactivity

Reactivity
Refer to Section 10: Possibility of hazardous reactions

Chemical Stability
Stable under normal conditions of storage and handling.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Avoid contamination with oxidising agents i.e., nitrates, oxidising acids, chlorine bleaches, pool chlorine etc., as ignition may result. Strong acids, acid chlorides, acid anhydrides, chloroformates.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Possibility of hazardous reactions
Reacts with incompatible materials.

Hazardous Polymerization
Not available

SECTION 11: Toxicological information

Toxicology Information
Toxicity data for material given below.

Acute Toxicity - Oral
Calcium carbonate
LD50 (rat): > 2000 mg/kg
Source: Europe ECHA Registered Substances - Acute toxicity

Ammonia, aqueous solution
LD50 (rat): 350 mg/kg

Acute Toxicity - Inhalation
Ammonia, aqueous solution
LC50 (rat): 2000 ppm/4h

Acute Toxicity - Dermal
Calcium carbonate
LD50 (rat): > 2000 mg/kg
Source: Europe ECHA Registered Substances - Acute toxicity

Ingestion
Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation
May cause respiratory irritation. Inhalation of product dust/vapours can cause irritation of the nose, throat and respiratory system. The body's response to such irritation can cause further lung damage. Inhalation hazard is increased at higher temperatures.

Ammonia, aqueous solution
Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases.

Skin
Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye
Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Skin Corrosion/Irritation
Calcium carbonate
Species: Rabbit
Dose Levels: 500 mg/24h
Result: Moderately irritating

Serious Eye Damage/Irritation
Calcium carbonate
Species: Rabbit
Dose Levels: 0.75 mg/24h
Result: Severe eye irritation

Ammonia, aqueous solution
Dose Levels: 0.25 mg
Result: Severe eye irritation

Dose Levels: 1 mg/30s
Result: Severe eye irritation

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
May cause respiratory irritation.

STOT - Repeated Exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
Not expected to be an aspiration hazard.

Subchronic/Chronic Toxicity
The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
Repeated or prolonged exposure to irritants may produce conjunctivitis.

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.
Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.
Prolonged or repeated minor exposure to ammonia gas/vapour may cause long-term irritation to the eyes, nose and upper respiratory tract. Repeated exposure or prolonged contact may produce dermatitis, and conjunctivitis.
Other effects may include ulcerative changes to the mouth and bronchial and gastrointestinal disturbances. Adaptation to usually irritating concentrations may result in tolerance. In animals, repeated exposures to sub-lethal levels produces adverse effects on the respiratory tract, liver, kidneys and spleen. Exposure at 675 ppm for several weeks produced eye irritation in dogs and rabbits; corneal opacity, covering between a quarter to one half of the total surface area, was evident in rabbits.

SECTION 12: Ecological information

Ecotoxicity
The available ecological data is given below.

Persistence and degradability
Ammonia, aqueous solution
Persistence in water/soil: Low
Persistence in air: Low

Mobility
Ammonia, aqueous solution
Mobility: Low
KOC: 14.3

Environmental Fate
For Ammonia:
Atmospheric Fate: Ammonia reacts rapidly with available acids (mainly sulfuric, nitric, and sometimes hydrochloric acid) to form the corresponding salts. Ammonia is persistent in the air.
Aquatic Fate: Biodegrades rapidly to nitrate, producing a high oxygen demand. Non-persistent in water (half-life 2 days).
Ecotoxicity: Moderately toxic to fish under normal temperature and pH conditions and harmful to aquatic life at low concentrations. Does not concentrate in food chain.
DO NOT discharge into sewer or waterways.

Bioaccumulative Potential
Ammonia, aqueous solution
Low bioaccumulation potential.
Log Kow: 0.229

Other Adverse Effects
Not available

Environmental Protection
Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish
Calcium carbonate
LC50 (fish): > 56000 mg/l/96h
Source: US EPA, Ecotox database - Aquatic Toxicity Data

Ammonia, aqueous solution
LC50 (fish): 15 mg/l/96h
NOEC (fish): 3.5 mg/l/72h
Source: US EPA, Ecotox database - Aquatic Toxicity Data

Acute Toxicity - Algae
Calcium carbonate
EC50 (algae or other aquatic plants): > 14 mg/l/72h
NOEC (algae or other aquatic plants): 14 mg/l/72h
Source: Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity

Hazardous to the Ozone Layer
This product is not expected to deplete the ozone layer.

SECTION 13: Disposal considerations

Disposal Considerations
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
DO NOT allow wash water from cleaning or process equipment to enter drains.
Product Disposal:
Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility.
Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.
Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.
In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Notice 2017. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.
Container Disposal:
The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.
Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.
In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

SECTION 14: Transport information

Transport Information
Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.
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.

UN Number
None Allocated

Proper Shipping Name
None Allocated

Hazard Class
None Allocated

Packing Group
None Allocated

UN Number (Air Transport, ICAO)
None Allocated

IATA/ICAO Proper Shipping Name
Not dangerous for conveyance under IATA code

IATA/ICAO Hazard Class
None Allocated

IATA/ICAO Packing Group
None Allocated

IMDG UN Number
None Allocated

IMDG Proper Shipping Name
Not dangerous for conveyance under IMO/IMDG code

IMDG Hazard Class
None Allocated

IMDG Packing Group
None Allocated

IMDG Marine pollutant
No

Transport in Bulk
Not available

Special Precautions for User
Not available

SECTION 15: Regulatory information

Regulatory Information
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017, New Zealand.
Group Standard: Construction Products (Subsidiary Hazard) Group Standard 2017

HSNO Approval Number
HSR002544

Tolerable exposure limit (TEL)
Not available

Environmental exposure limit (EEL)
Not available

Certified Handler
Not available

Tracking
Not available

Controlled Substance Licence Requirements
Not available

Montreal Protocol
Not Listed

Stockholm Convention
Not Listed

Rotterdam Convention
Not Listed

Agricultural Compounds, including Veterinary Medicines (ACVM)
Not available

SECTION 16: Other information

Date of preparation or last revision of SDS
SDS amendment: October 2021
Section 1: Identification
SDS Created: July 2021

Literature References
Hazardous Substances and New Organisms Act 1996.
Health and Safety at Work (Hazardous Substances) Regulations 2017.
Workplace Exposure Standards and Biological Exposure Indices.
Agricultural Compounds and Veterinary Medicines Act 1997.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Transport of Dangerous goods on land NZS 5433.
Recommendations on the Transport of Dangerous Goods – Model Regulations.
Dangerous Goods Emergency Action Code List.
Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).
Assigning a hazardous substance to a group standard.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

END OF SDS