

Safety Data Sheet



Section 1 PRODUCT IDENTIFICATION

Product Name:	Guardian WB Anti-Graffiti Coating Part B
Synonyms:	None
Recommended Use:	Aliphatic polyisocyanate curing agent for Guardian WB Anti-Graffiti Coating Clear and White Part A
Supplier Information:	Guardian Protective Coatings Pty Ltd 26 Paramount Drive Wangara WA 6055 Tel: 08 6389 2100 www.guardit.net Emergency contact: +61 413 610 147 (24 hours)

Section 2 HAZARD IDENTIFICATION

Hazard Classification:	NOT DANGEROUS GOODS according to the criteria of the ADG code HAZARDOUS CHEMICAL according to the criteria of Safe Work Australia Flammable liquid, Category 4 Sensitisation of the skin, Category 1 (H317) Acute toxicity, Inhalative, Category 4 (H332) Specific Target Organ Toxicity (single exposure), Inhalative, Category 3 (H335) Chronically hazardous to the aquatic environment, Category 3
	Label elements: Pictogram WARNING
Hazard Statements:	Signal Word: WARNING H227 Combustible liquid H317 May cause an allergic skin reaction H332 Harmful if inhaled H335 May cause respiratory irritation H412 Harmful to aquatic life with long lasting effects

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Precautionary Statements:	PREVENTION P210 Keep away from heat, sparks, open flames, hot surfaces and other ignition source. No Smoking P261 Avoid breathing mists/vapours/spray P271 Use only outdoors or in a well-ventilated area P272 Contaminated work clothing should not be allowed out of the workplace P273 Avoid release to the environment P280 Wear protective gloves/eye protection/face protection RESPONSE P302+P352 IF ON SKIN: Wash with plenty of soap and water P304+P312 IF INHALED: Call a poison centre or doctor if you feel unwell P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing P333+P313 If skin irritation or rash occurs: Get medical advice/attention P363 Wash contaminated clothing before reuse P370 + P378 In case of fire: Use foam/water spray/fog for extinction STORAGE P403+P233 Store in a well-ventilated place. Keep container tightly closed DISPOSAL P501 Dispose of contents/container in accordance with local regulations
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Section 3 COMPOSITION

Ingredient	CAS Number	Proportion
Hexamethylene-1,6-diisocyanate homopolymer	28182-81-2	30-50%
Aliphatic polyisocyanate	666723-27-9	30-50%
Hexamethylene-1,6-diisocyanate	822-06-0	<0.1%
Dipropylene glycol dimethyl ether	111109-77-4	10-30%

Proportion (% weight per weight)

Section 4 FIRST AID MEASURES

Poisons Information Centres in each State capital city can provide additional assistance for scheduled poisons.

Ingestion: Do **NOT** induce vomiting. Transport immediately to the nearest medical facility. If spontaneous vomiting occurs, place head below hips to prevent aspiration.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes with eyelids held open. Transport to hospital or medical centre and urgently seek medical assistance.

Skin Contact: Immediately wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before re-use. Seek medical advice if irritation develops or persists.

Inhalation: Remove victim from exposure to fresh air immediately – avoid becoming a casualty. Remove contaminated clothing, and loosen remaining clothing. Allow patient to assume the most comfortable position and keep warm. Keep at rest until fully recovered. If there is difficulty breathing seek medical advice.

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Section 5 FIRE FIGHTING MEASURES

Specific Hazards:

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapours and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

Fire Fighting Advice:

On burning this product may emit toxic fumes. Heating can cause expansion or decomposition leading to violent rupture of containers.

Keep containers cool with water spray.

Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or decomposition products.

Do not allow extinguishing water to enter the soil, ground water or surface waters.

Suitable Extinguishing Media:

Foam, dry agent (Carbon Dioxide, Dry Chemical powder). Do not use water in a jet.

Section 6 ACCIDENTAL RELEASE MEASURES

Clear area of all unprotected personnel. Remove all possible sources of ignition.

Product is slippery when spilt. Avoid accidents and clean up immediately.

Wear protective equipment to prevent skin, eye contamination or inhalation of vapours.

Contain immediately – prevent run-off into drains and waterways. Use absorbent (soil, sand, or other inert material). Collect and seal in properly labelled containers for disposal per local regulations. If contamination of sewers or waterways has occurred advise the local emergency services.

Section 7 HANDLING AND STORAGE

Storage:

Store tightly closed in a cool, dry, well ventilated area.

Store away from acids, oxidising agents, and sources of heat or ignition. Keep containers closed at all times when not in use. Check regularly for leaks. Reacts with moisture in air and water.

This material is Harmful and a Scheduled Poison S6. It must be stored, maintained and used in accordance with relevant regulations.

The precautions required in the handling of isocyanates must be taken. Avoid contact with skin and eyes and inhalation of vapours.

Provide sufficient air exchange and/or exhaust in work rooms. Exhaust ventilation is necessary if product is sprayed.

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Section 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Limits.

Exposure standards for constituent:

Material	TWA		STEL		Notices
	ppm	Mg/m ³	ppm	mg/m ³	
Hexamethylene-1,6-diisocyanate	-	0.02	-	0.07	SK

As published by the National Occupational Health and Safety Commission (Worksafe Australia).

TWA:

The Time Weighted Average airborne concentrations over an eight-hour working day, for a five day working week over an entire working life.

STEL:

(Short Term Exposure Limit) The average airborne concentration over a fifteen minute period which should not be exceeded at any time during a normal eight-hour work day.

SK Notice:

Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

According to current knowledge, these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These exposure standards are guides to be used in the control of Occupational Health Hazards. All atmospheric contamination should be kept as low as is practicable.

Exposure standards should **NOT** be used as the defining line between safe and dangerous concentrations of chemicals. They are **NOT** a measure of relative toxicity.

Engineering Controls: Ensure adequate ventilation, and that air concentrations of components are controlled below quoted Exposure Standards. Always keep containers closed when not in use.

Vapours are heavier than air – prevent concentration of vapours in low lying areas such as hollows and sumps. DO NOT enter confined spaces where vapour may have collected.

Respiratory protection is required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter is recommended.

Respirators should comply with AS1716 or equivalent.

Personal Protective Equipment: Overalls, Safety Shoes, Chemical Goggles, and Gloves.

Avoid skin and eye contact, and inhalation of vapour. Wear overalls, chemical goggles and impervious gloves.

The can may be under pressure. Before opening, place cloth over lid to prevent contents splashing. To open, hold hand firmly on cloth over lid to prevent lid flying off, then lever lid off gradually.

Always wash hands before smoking, eating, drinking, or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

In case of hypersensitivity of the respiratory tract and skin (eg asthmatics and those who suffer from chronic bronchitis and chronic skin complaint) it is inadvisable to work with this product.

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Section 9 PHYSICAL PROPERTIES

Appearance: Water white liquid
Solubility: Miscible with water

Odour:	Slight inherent odour	Density @ 20°C:	~1.10 kg/l
pH:	NAP	Flash point & Method:	~65°C Setaflash closed cup ASTM D3278
Vapour Pressure 20°C (mm Hg):	NAV	Upper Explosive Limit (UEL):	NAV
Vapour Density (Air = 1)	NAV	Lower Explosive Limit (LEL):	NAV
Initial Boiling Point °C:	175°C	Ignition Temperature °C:	~165
Freezing Point °C:	NAP	Percent Volatiles (by weight):	~20 %
NAP = Not Applicable, NAV = Not Available			

Section 10 STABILITY AND REACTIVITY

Stability: Product is stable. Exothermic reactions with amines and alcohols; reacts slowly with water forming carbon dioxide, in closed containers risk of bursting owing to increased pressure.

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, toxic smoke / fumes

Section 11 TOXICOLOGICAL INFORMATION

Toxicological studies on the product are not available.

Information on toxicological effects of constituent hexamethylene-1,6-diisocyanate homopolymer:

Acute toxicity, oral:

LD50 rat, female: >= 5.000 mg/kg
Method: OECD Test Guideline 423

Acute toxicity, dermal:

LD50 rat, male/female: > 2.000 mg/kg
Method: OECD Test Guideline 402
Studies of a comparable product.
LD50 rabbit, male/female: > 2.000 mg/kg
Studies of a comparable product.

Acute toxicity, inhalation:

LC50 rat, female: 0,390 mg/l, 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Toxicological studies of a comparable product. May cause sensitisation of mucous membranes and respiratory tract by inhalation.
The substance was tested in a form (i.e. specific particle size distribution) that is different from the forms in which the substance is placed on the market and in which it can reasonably be

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expected to be used. Based on the "split-entry" concept and available data on particle size during end-use of the substance a modified classification for acute inhalation toxicity is justified. Converted acute toxicity point estimate 1,5 mg/l

Test atmosphere: dust/mist

Method: Expert judgement

Assessment: Harmful if inhaled.

Primary skin irritation:

Species: rabbit

Result: slight irritant

Classification: No skin irritation

Method: OECD Test Guideline 404

Primary mucosae irritation:

Species: rabbit

Result: slight irritant

Classification: No eye irritation

Method: OECD Test Guideline 405

Sensitisation:

Skin sensitization (local lymph node assay (LLNA)):

Species: mouse

Result: positive

Classification: May cause sensitization by skin contact.

Method: OECD Test Guideline 429

Respiratory sensitization

Classification: No classification according to EC Directives 2006/121/EC or 1999/45/EC as respiratory sensitizer.

No pulmonary sensitisation observed in animal tests.

No pulmonary sensitisation potential was observed in guinea pigs after either intradermal or inhalative induction with polyisocyanate based on isophorone diisocyanate.

Subacute, subchronic and prolonged toxicity:

NOAEL: 3,3 mg/m³ air

Application Route: Inhalative

Species: rat, male/female

Dose Levels: 0 - 0,5 - 3,3 - 26,4 mg/m³

Exposure duration: 90 d

Frequency of treatment: 6 hours a day, 5 days a week

Test substance: as aerosol

Method: OECD Test Guideline 413

Toxicological studies of a comparable product.

Evidence of damage to organs other than the organs of respiration was not found.

Carcinogenicity:

No data available.

Reproductive toxicity/Fertility:

Available data show no indications for reproductive toxicity.

Reproductive toxicity/Teratogenicity:

Animal experiments on structurally similar compounds showed no indication of specific reproductive toxicity.

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Genotoxicity in vitro:

Test type: Salmonella/microsome test (Ames test)

Metabolic activation: with/without

Result: No indication of mutagenic effects.

Method: OECD Test Guideline 471

Test type: Point mutation in mammalian cells (HPRT test)

Metabolic activation: with/without

Result: negative

Method: OECD Test Guideline 476

Toxicological studies of a comparable product.

Test type: Chromosome aberration test in vitro

Test system: Chinese hamster V79 cell line

Metabolic activation: with/without

Result: negative

Method: OECD Test Guideline 473

Toxicological studies of a comparable product.

STOT evaluation – one-time exposure:

Route of exposure: Inhalative

May cause respiratory irritation.

STOT evaluation – repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration toxicity:

Based on available data, the classification criteria are not met.

CMR Assessment:

Carcinogenicity: Based on available data, the classification criteria are not met.

Mutagenicity: In vitro tests did not show mutagenic effects. Based on available data, the classification criteria are not met.

Teratogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity/Fertility: Based on available data, the classification criteria are not met.

Toxicology Assessment:

Acute effects: Harmful if inhaled.

Sensitization: May cause sensitization by skin contact.

Additional information:

Special properties/effects: Over-exposure, especially when spraying coatings containing isocyanate without the necessary precautions, entails the risk of concentration-dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations, including concentrations below the UK Workplace Exposure Limit (WEL). Prolonged contact with the skin may cause tanning and irritant effects.

Animal tests and other research indicate that skin contact with diisocyanates can play a role in causing isocyanate sensitization and respiratory reaction.

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Section 12 ECOLOGICAL INFORMATION

Ecotoxological studies of the product are not available.

This material is not readily biodegradable.

Avoid contaminating any sea, rivers, streams, sewer, storm water, or other body of water.

Section 13 DISPOSAL CONSIDERATIONS

Do not pour unwanted product down the drain.

Keep unwanted product in sealed containers for disposal in accordance with applicable national and local laws.

Section 14 TRANSPORT INFORMATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

UN Number:	Not Applicable	HAZCHEM:	Not Applicable
UN Proper Shipping Name:	Not Applicable	Packaging group:	Not Applicable
Class and Sub Risk	Not Applicable		

Special Precautions: Keep dry. Avoid heat above 50°C. Keep away from foodstuffs, acids and alkalis.

Section 15 REGULATORY INFORMATION

Hazardous according to Worksafe Australia

Hazard Category:

Acute toxicity, Inhalative, Category 4 (H332)

Sensitisation of the skin, Category 1 (H317)

Specific Target Organ Toxicity (single exposure), Inhalative, Category 3 (H335)

Chronically hazardous to the aquatic environment, Category 3 (H412)

Poisons Schedule (Australia): S6 (Standard for the Uniform Scheduling of Medicines and Poisons)

Any existing national regulations on the handling of isocyanates must be observed.

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Section 16 OTHER INFORMATION

Date of preparation: July 2025

Version 1.05

Reason for change: Update

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular, how to safely handle and use the product in the work-place.

Since the supplier cannot anticipate or control the conditions under which this product may be used or handled, each user must, prior to using or handling this product, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is required to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers, and is also available from the company upon request.