



Safety Data Sheet

SECTION 1.

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier	MULTI-GARD GP 22 ^{AU} BASE (Part A)
Variants	<i>Light Grey</i>
Product code(s)	Q7003B
Proper shipping name	PAINT
Recommended use	Part A of a two component epoxy system. Consult SDS for the Converter (Part B) prior to use. For industrial use only.
Manufacture / Importer details	Resene Paints (Australia) Limited. 7 Production Avenue, Molendinar. Queensland. 4214.
Emergency phone numbers	Available Monday – Friday, 8:00 a.m. – 5:00 p.m.
Free call	1800 738 383
Phone	07 5512 6600
Fax	07 5512 6697
Poisons Information Centre	131126 [available 24 hours]

SECTION 2.

HAZARDS IDENTIFICATION

Classification of the hazardous chemical or mixture according to the criteria of Safe Work Australia

GHS Classification: Flammable Liquids Category 2, Serious Eye Damage/Irritation Category 1, Specific Target Organ Toxicity (Single Exposure) Category 3, Carcinogenicity Category 2.

Label elements



Flame Exclamation Mark Corrosion Health Hazard

Signal word

DANGER

Hazard statements

- H225 Highly flammable liquid and vapour.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- AUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements: Prevention

- P210 Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
- P233 Keep container tightly closed.
- P240 Ground/Bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating and lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P280 + P281 Wear protective gloves, eye protection/face protection and other personal protection as required.
- P261 Avoid breathing fumes, mist, vapours, spray or sanding dust.
- P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

Precautionary statements: Response

- P370 + P378 In case of fire: Use CO₂, dry chemical or foam for extinction.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P303 + P361 + P353 IF ON SKIN (or Hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary statements: Storage

- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P233 Keep container tightly closed.

Precautionary statements: Disposal

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

SECTION 3.	COMPOSITION AND INFORMATION ON INGREDIENTS
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Ingredients	Name	CAS	% [weight]
	Solid: Reaction product: Bisphenol-A-(epichlorhydrin)	25068-38-6	10 - < 30
	Methyl isobutyl ketone	108-10-1	10 - < 30
	n-Butanol	71-36-3	< 10
	Xylene	1330-20-7	< 2
	Ingredients not contributing to the classification	Various	30 - 60

SECTION 4.	FIRST AID MEASURES
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Description of necessary first aid measures

Ingestion	Rinse mouth with plenty of water then provide liquid slowly and as much as the person can comfortably drink. If swallowed DO NOT induce vomiting. If vomiting occurs, place person on their left side, tilt head back to maintain open airway and to prevent aspiration. Observe patient and seek medical advice.
Eye contact	Immediately flush eyes with fresh water. Continue rinsing for several minutes. Ensure complete irrigation of the eye by holding the eyelids apart and away from the eye. Seek medical attention if pain persists or recurs. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin contact	Immediately flush skin with plenty of water while removing contaminated clothing and shoes. Wash skin with soap if available. Seek medical attention if irritation persists or if a rash develops.
Inhalation	Remove the person from the contaminated area and into fresh air. Allow them to rest and observe. Seek medical attention if breathing is difficult. Seek medical advice if symptoms persist.
First Aid facilities	Safety shower and eye wash facilities.

Symptoms caused by exposure Contact with skin or eyes causes irritation. Prolonged or repeated skin contact with the liquid may cause defatting of the skin which may lead to dermatitis. Vapour may cause severe eye irritation. Inhalation of vapour or mists may cause irritation to the respiratory tract.

Medical attention and special treatment Basic life support. Treat symptomatically. Watch for signs of respiratory insufficiency and assist ventilation as necessary in the event of an allergic reaction.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media Carbon dioxide. Foam. Dry chemical powder.
For large fires – Water spray or fog.

Specific hazards Flammable liquid and vapour. On combustion this product may emit toxic fumes and clouds of acrid smoke. Vapours are heavier than air and will accumulate. Vapours will form explosive concentrations with air. Vapours travel long distances and will flash back.

Special protective equipment and precautions for fire fighters Wear breathing apparatus plus chemical protective suit and gloves. DO NOT approach containers suspected of being hot. May be violently or explosively reactive. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Hazchem code 3[Y]E

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Eliminate all ignition sources. Avoid contact with spilled or released material. Avoid breathing vapour and avoid contact with skin and eyes. Control personal contact by using protective equipment. Clean up spills immediately.

Environmental precautions Prevent, by any means available, spillage from entering drains or water course or soil.

Methods and materials for containment and clean up. Contain and soak up released material with fire-resistant absorbent such as sand, earth or vermiculite. Cover drains to prevent material from entering waterways. Stop leak if safe to do so. Using only spark-free shovels and explosion proof equipment collect absorbent material and seal in labelled drums for proper disposal. Dispose of in accordance with local, state and federal regulations.

Seek assistance from emergency services for large spills. Evacuate unprotected personnel from the immediate vicinity. Contain released material then blanket the spill using foam (where available) to prevent the spread of vapour.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling Do not get in eyes, on skin, or on clothing. Wear personal protection equipment. Do not breathe vapours or spray mists. When handling, do not eat drink or smoke. Always wash hands with soap and water after handling. Observe proper occupational hygiene work practices. Wear a dust mask when sanding previous coatings to avoid breathing dust.

Use only in a well-ventilated area. Use mechanical extraction to remove vapour where necessary. Avoid smoking, naked lights, heat and other ignition sources. Vapour may ignite on pumping or pouring due to static electricity. Do not use plastic buckets. Use spark free tools when handling.

Conditions for safe storage including any incompatibilities Store in a metal can or drum in an approved flammable liquids storage area. Check all containers are clearly labelled and free from leaks. Keep containers securely sealed when not in use. Store in a cool dry, well-ventilated area, away from sources of ignition. Avoid storage with oxidisers.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Australian national exposure standards	No exposure standard has been established for this product. Exposed individuals are not reasonably expected to be warned, by smell, that an exposure standard is being exceeded. If the breathing zone concentration of ANY of the components listed below is exceeded then the individual is deemed to be over exposed.			
Component	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Methyl isobutyl ketone	50	205	75	307
Xylene	80	350	150	655
n-butanol	50 peak limitation	152 peak limitation	-	-
Peak limitations	Peak limitations have been set for n-butanol (see above). Absorption through the skin may be a significant source of exposure for n-butanol.			
Biological monitoring	Not required.			
Engineering controls	Use in a well ventilated area. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances to maintain vapour levels below the Lower Explosion Limit [LEL] for the solvents used. If the risk of overexposure exists, wear an approved respirator.			
Individual protection measures including Personal Protection Equipment (PPE)				
Eye and face protection	Wear safety glasses or goggles. Avoid wearing contact lenses. Contact lenses pose a special hazard; soft lenses may concentrate and absorb irritants.			
Skin protection	Wear chemical protective gloves, e.g. Nitrile or nitrile-butadiene rubber. Do not use cotton, leather, PVC, rubber or polyethylene gloves as they will absorb the resin and solvents. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.			
Protective clothing	Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. Wear safety footwear.			
Respiratory protection	Selection of the Class and Type of respirator will depend on the level of confinement of the contamination. The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. Refer to AS1716 for selection of an appropriate respirator.			

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Grey viscous liquid
Odour	Solvent
pH	Not applicable
Vapour pressure	0.87
Vapour density	3.46
Boiling point	122°C
Freezing point	Not established
Flash point	23°C
Solubility	Immiscible
Density	1.45
Viscosity	Not available
UEL	8.3%
LEL	1.2%
Auto-ignition temperature	435°C

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Epoxy groups can react with amines, phenols, mercaptans, isocyanates or acids. Amines are the most commonly used curing agents/hardeners for epoxides and the case of step - growth polymerizations is mainly represented by epoxy – amine reactions.
Chemical stability	Product is considered stable.
Conditions to avoid	Ignition sources. Presence of incompatible materials. Avoid unintended contact with amines.
Incompatible materials	Flammable liquids should not be stored with:- Class 1 – Explosives Class 2 – Flammable gases Class 2.3 – Poisonous gases Class 4.2 – Spontaneously combustible substances Class 5.1 – Oxidising agents Class 5.2 – Organic peroxides Class 7 – Radioactive substances.
Hazardous decomposition products	Decomposition products from epoxy resins depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.
Hazardous reactions	Polymerization will not occur by itself. Mixing of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicological information for this product is not available. Reference is made where possible to the individual constituents of the mixture.

Toxicology Data:

Ingredient	LD₅₀	LC₅₀	Further Data
Solid: Reaction product: Bisphenol-A-(epichlorhydrin)	>15000mg/kg rat(oral)	No data	Sensitisation: No data Carcinogenicity: No data Mutagenicity: No data Reproductive toxicity: No data
Methyl isobutyl ketone	>2000mg/kg rat(oral)	8.2-16.4 g/m ³ / 4hours, Rat	IRRITATION Eye (human): 200 ppm/15m Skin (rabbit): 500 mg/24h - Mild Inhalation: Vapour may cause a narcotic effect. Carcinogenicity: Category 2 Reproductive toxicity: Fetotoxic at 12 300 mg/m ³ in rats exposed for 6 – 15 days. Mutagenic: No Sensitisation: No
n-butanol	790mg/kg rat (oral) >2000mg/kg rabbit (dermal)	25mg/L / 4hours, Rat	IRRITATION Lowest inhalation toxicity TCLo [human] 25ppm – irritation Chronic effects: No data Irritation skin (rabbit):
Xylene (mixed isomers)	>2000mg/kg rat(oral)	> 20mg/L / 4hours, Rat	

Acute Health Effects:

- Swallowed:** Expected to be of low to moderate toxicity: Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. May cause irritation to the mouth, throat, oesophagus, and stomach with nausea, abdominal discomfort, vomiting and diarrhoea.
- Eye:** Irritating to eyes causing tearing, stinging, blurred vision and redness.
Ocular symptoms from exposure to high vapour concentrations may include a burning sensation, blurring of vision, lachrymation, and photophobia with symptoms becoming more severe toward the end of the work week.
- Skin:** May cause moderate skin irritation.
- Inhaled:** Harmful by inhalation. Inhalation of vapours may cause irritation to the respiratory system. Inhalation of high concentrations may cause central nervous system depression resulting in headaches, dizziness, drowsiness and nausea. Continued inhalation may result in unconsciousness, coma and even death.

Chronic Health Effects:

Repeat exposure to high doses of solvent vapours can affect the nervous system, or may cause liver or kidney damage. Prolonged contact with the liquid may cause defatting of the skin which can lead to dermatitis. n-Butanol and Xylene are reported to have caused hearing loss in laboratory animals on exposure to high vapour concentrations. Circumstantial evidence points to n-butanol vapour as cause of a special vacuolar keratitis in human beings following repeated exposure to high vapour concentrations. In some patients vacuolar keratopathy causes no complaints, but in the most severely affected it has been associated with pain and tearing, characteristically most marked on first opening eyes in morning.

SECTION 12. ECOLOGICAL INFORMATION

Avoid release to the environment

Methyl isobutyl ketone:

- Ecotoxicity:** Fish: LC₅₀, *Carassius auratus* (goldfish), 24hr, 460 mg/L
LC₅₀ *Pimephales promelas* (flathead minnow), 96hr: ~525 mg/L
Aquatic Invertebrates:
EC₅₀, *Daphnia magna* (Water flea), 24hr, 1550 mg/l
Algae: ErC₅₀, *Scenedesmus capricornutum* (fresh water algae), Threshold concentration for reduction of total biomass, 8 days: 725mg/L

- Mobility:** Floats on water, highly mobile and may contaminate groundwater.
Persistence/degradability: Readily biodegradable. Oxidises by photo-chemical reactions in air.
Bioaccumulation: Does not bioaccumulate.

Solid: Reaction product: Bisphenol-A-(epichlorhydrin):

- Ecotoxicity:** No data
Mobility: In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.
Persistence/degradability: Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

n-Butanol:

- Ecotoxicity:** Fish: LC₅₀ *Pimephales promelas* (flathead minnow), 96hr: 1400 mg/L

Aquatic Invertebrates:

EC₅₀, *Daphnia magna* (Water flea), 48hr, 1755 mg/l

Mobility:	This product is soluble in water and therefore highly mobile on dilution risking contamination of soil, waterways, grasslands, and groundwater.
Persistence/degradability:	Readily biodegradable. Volatilises in air.
Bioaccumulation:	Does not bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	PRODUCT: Product/ Rinsates/ Spillage from packaging or equipment are not to be discharged to the environment. Organise disposal with recognised specialised hazardous waste operators. PACKAGING: Decontaminate the packaging by triple rinsing. Allow to dry then puncture/crush the package to render it incapable of holding other product. Offer for disposal to the local landfill or recycle steel containers via steel can recycling programs. Disposal of empty paint containers via domestic recycling programs may differ between local authorities. Check with your local Council first.
Special precautions for landfill or incineration	Incinerate dry, cured residue at an approved site.

SECTION 14. TRANSPORT INFORMATION

UN number	1263
UN proper shipping name	PAINT
Class	3
Subsidiary risk	None
Marine pollutant	No
Packing Group	II
Special precautions for user	Flammable. Keep dry. Keep separate from foodstuffs.
Hazchem code	3[Y]E

SECTION 15. REGULATORY INFORMATION

SUSMP:	Not a scheduled poison.
AICS:	The hazardous components listed in Section 3 of this SDS appear in the Australian Inventory of Chemical Substances (AICS) database.
NPI listed Chemicals:	Xylene, Methyl isobutyl ketone
HVCL listed chemicals:	Reaction product: Bisphenol-A-(epichlorhydrin), Xylene, n-butanol,

SECTION 16. OTHER INFORMATION

Date of Preparation: 1st June 2016

Supersedes: 11th March 2015

Literature references:

AICS Search page – NOHSC <http://www.nicnas.gov.au/industry/aics/search.asp>

SDS's for individual raw materials.

Safe Work Australia: Hazardous Substances Information System:
Exposure Standards:
<http://hsis.safeworkaustralia.gov.au/ExposureStandards>

GHS Hazardous Substances list:

http://hsis.safeworkaustralia.gov.au/GHSInformation/GHS_Hazardous_Chemical_Information_List

Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Third Revised Edition. United Nations. New York and Geneva, 2009.

Abbreviations:

ADG	Australian Code for the Transport of Dangerous Goods by Road & Rail
AICS	Australian Inventory of Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HVICL	High Volume Industrial Chemicals List
IARC	International Agency for Research on Cancer
NOHSC	National Occupational Health and Safety Commission
NPI	National Pollutions Inventory
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
CAS Number	Chemical Abstract Service registry number
LD ₅₀	Median lethal dose
LC ₅₀	Median lethal concentration.
TWA	Time weighted average
STEL	Short term exposure limit

Safety data sheets are updated frequently. Please ensure that you have a current copy.

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END OF SDS