



Safety Data Sheet

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier	MULTI-GARD ETCH ^{AU}
Variants	<i>Manufacturer's Colour Range</i>
Product code(s)	Q7000
Proper shipping name	PAINT
Recommended use	General purpose etch primer
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, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Irritation Category 1, Sensitisation – Skin Category 1, Toxic to Reproduction Category 1A, Specific Target Organ Toxicity (Repeated Exposure) Category 2, Specific Target Organ Toxicity (Single Exposure) Category 3.

Label elements



Flame



Health Hazard



Corrosion



Exclamation Mark

Signal word

DANGER

Hazard statements

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H336 May cause drowsiness or dizziness.

Precautionary statements: Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- 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.

- P264 Wash skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P260 Do not breathe fumes, mist, vapours, spray or sanding dust.
 P271 Use only outdoors or in a well-ventilated area.

Precautionary statements: Response

- P321 Specific treatment (see advice on this label).
 P370 + P378 In case of fire: Use CO₂, dry chemical or foam for extinction.
 P303 + P361 + P353 IF ON SKIN (or Hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P352 Wash with plenty of soap and water.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing 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.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P304 + P340 IF INHALED: Remove 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.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P309 + P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Precautionary statements: Storage

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

Precautionary statements: Disposal

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

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	% [weight]
	Isopropanol	67-63-0	30 – 60
	Toluene	108-88-3	10 - < 30
	n-Butanol	71-36-3	< 10
	Xylene	1330-20-7	< 10
	Methyl ethyl ketone	78-93-3	< 10
	1-methoxy-2-propanol acetate	108-65-6	< 10
	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6	< 10
	Ingredients not contributing to classification	Various	< 10

SECTION 4. FIRST AID MEASURES

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. Contact with the skin may cause an allergic skin reaction. Persons with predisposed skin conditions or those known to be sensitised to epoxy resins should take extra precautions or avoid using this product. Vapour may cause severe eye irritation. Inhalation of vapour or mists may cause drowsiness or dizziness.
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. This product may pose a long-term hazard to the aquatic environment.
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
Xylene	80	350	150	655
Toluene	50	191	150	574
Isopropanol	400	963	500	1230
n-Butanol	50peak	152peak	-	-
Methyl ethyl ketone	150	445	300	890
1-methoxy-2-propanol acetate	50	274	100	548

Peak limitations

Set 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-butatoluene 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	Viscous liquid, various colours
Odour	Solvent
pH	Not applicable
Vapour pressure	3.6
Vapour density	2.5
Boiling point	96°C
Freezing point	Not established
Flash point	12°C
Solubility	Immiscible
Density	0.9
Viscosity	77.78 cSt
UEL	10.8%
LEL	1.9%
VOC	730 – 740 g/L

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	Product is considered stable.
Conditions to avoid	Ignition sources. Presence of incompatible materials.
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	Carbon monoxide, nitrogen oxides and unidentified organic compounds. Consider smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.
Hazardous reactions	Hazardous polymerisation will not occur.

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
Isopropanol	>2000mg/kg rat(oral) >2000mg/kg rabbit (dermal)	> 20mg/L / 8hours, Rat	Carcinogenicity: No Mutagenicity: No Sensitisation: No
Toluene	>2000mg/kg rat (oral) 14100mg/kg rabbit (dermal)	> 20mg/L / 4hours, Rat	Inhalation of vapour may cause a narcotic effect. Carcinogenicity: No [IARC] Reproductive toxicity: Category 2 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
Xylene (mixed isomers)	>2000mg/kg rat(oral) >2000mg/kg rabbit (dermal)	> 20mg/L / 4hours, Rat	Irritation skin (rabbit): 500mg/24 hours. Carcinogenicity: No [IARC] Mutagenicity: No Reproductive toxicity: No
Methyl ethyl ketone	>2000mg/kg rat(oral) >2000mg/kg rabbit (dermal)	> 20mg/L / 4hours, Rat	Sensitisation: No Mutagenicity: No Sensitisation: No
1-methoxy-2-propanol acetate	>2000mg/kg rat(oral) >2000mg/kg rabbit (dermal)	> 20mg/L / 6hours, Rat	No data
Reaction product: Bisphenol-A-(epichlorhydrin)	>15000mg/kg rat(oral)	No data	Sensitisation: Positive (human & animal studies) Carcinogenicity: No Mutagenicity: No Reproductive toxicity: No

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. Inhalation of vapour may harm the unborn child. Prolonged contact with the liquid may cause defatting of the skin which can lead to dermatitis. Reaction Product: Bisphenol-A- (epichlorhydrin) epoxy resin has caused allergic skin reactions in humans. Exposure to a sensitizer, once sensitization has occurred, may manifest itself as a skin rash or inflammation or as an asthmatic condition, and in some individuals this reaction can be extremely severe. 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

Expected to be harmful to the environment with long lasting effects.
Avoid release to the environment

Isopropanol

Ecotoxicity:	Fish: Low toxicity: LC/EC/IC50 > 100mg/l Aquatic Invertebrates: Low toxicity: LC/EC/IC50 > 1000mg/l Algae: Expected to have low toxicity: LC/EC/IC50 > 1000mg/l Microorganisms: Low toxicity: LC/EC/IC50 > 1000mg/l
Mobility:	Miscible with water, if product enters soil it will be highly mobile and may contaminate groundwater.
Persistence/degradability:	Biodegradable, oxidises rapidly by photochemical reactions in air.
Bioaccumulation:	Not expected to bioaccumulate significantly.

Xylene and Toluene:

Ecotoxicity:	Fish: Toxic 1 < LC/EC/IC50 <= 10mg/l Aquatic Invertebrates: Harmful: 10 < LC/EC/IC50 <= 100mg/l Algae: Low toxicity: LC/EC/IC50 > 100mg/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 significantly.

Reaction product: Bisphenol-A-(epichlorhydrin):

Ecotoxicity:	Fish: LC ₅₀ , <i>Oncorhynchus mykiss</i> (rainbow trout), semi-static test, 96 h: 2 mg/l LC ₅₀ flathead minnow (96hr): 3.1 mg/L Aquatic Invertebrates: EC ₅₀ , <i>Daphnia magna</i> (Water flea), static test, 48 h, immobilization: 1.8 mg/l Algae: ErC ₅₀ , <i>Scenedesmus capricornutum</i> (fresh water algae), static test, Growth rate inhibition, 72 h: 11mg/l Micro-organisms: IC ₅₀ ; Bacteria, 18 h: > 42.6 mg/l
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Persistence/Degradability and Mobility:

Based on OECD guidelines, Reaction product: Bisphenol-A-(epichlorhydrin) cannot be considered to be readily biodegradable (12% biodegradation in 28 days, OECD test 302B). However, this does not mean that the material will not degrade under environmental conditions.

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	Yes: Chronic aquatic toxicity category 2
Packing Group	II
Special precautions for	Flammable. Keep dry. Keep separate from foodstuffs.

user

Hazchem code 3[Y]E

SECTION 15. REGULATORY INFORMATION

SUSMP: Poison Schedule: 5**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, Toluene, Methyl ethyl ketone**HVICTL listed chemicals:** Isopropanol, Reaction product: Bisphenol-A-(epichlorhydrin), Xylene, Toluene, n-Butanol, Methyl ethyl ketone, 1-methoxy-2-propanol acetate

SECTION 16. OTHER INFORMATION

Date of Preparation: 31st May 2016**Supersedes:** 10th 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
HVICTL	High Volume Industrial Chemicals List
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

LD₅₀ Median lethal doseLC₅₀ 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.**The information contained herein is based on data considered accurate and reliable to the best of our knowledge and belief as of the date compiled. However no warranty is expressed or implied regarding the accuracy of these data or the*

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END OF SDS