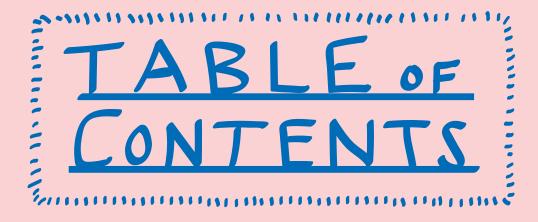
ARTFORCE BRISBANE An initiative of Brisbane City Council



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PART 1

Induction Form



This checklist is designed to help you, the registered Artforce participant, ensure that you have received and reviewed all of the relevant materials prior to commencing your Artforce project.

Please take some time to review your starter pack, including the safety information provided. Once you are satisfied with your review please confirm your understanding by ticking off each item on the check list and signing below.



Box Number and Location:

Registered Participant:

Safety

Tick 🗹 to confirm understanding

- Painting Procedures
- □ Emergency Procedures
- Safety Information Risk Assessment
- Paint and Cleaner Product and Safety
- Data Sheets
- Pre-Start Safety Checklist
- □ Site-Set Up Diagram
- □ Manual Handling Guide
- □ Covid 19 Direction
- Incident Reporting Form

Provided Materials:

Tick to confirm receipt

- □ High visibility safety vest
- □ Safety cones x 4 (TSB) x 6 (EPT)

MPLE

- High quality water-based paint (2.75L TSB; 8L EPT)
- UV clear coat (750ml TSB; 2L EPT)
- □ Mixing palette
- □ Mixing containers
- Paint prep cleaning agent
- □ Masking tape
- Drop sheets x 4 (TSB) x 6 (EPT)
- □ Tack cloth
- □ Rags x 2
- □ Sanding block
- □ Scraper
- □ Glue removal product
- □ Sandpaper

- Artforce Manual document wallet containing:
 - o Safety Documents listed left
 - o Authority to Paint Notice
 - o Weather Check (Resene flyer)
 - o Colour Mixing Guide
 - o Light Sensor Information
 - o Sticker Removal
 - o Documenting Your Artwork Photo Guide
 - o Image Release Form
 - o Insurances Public Liability & Personal Accident
 - o Feedback Survey
- Mobile equipment box x 1 (TSB) x 2 (EPT)
- □ Work-in-Progress Notice
- □ Artforce Brisbane t-shirt

Initial Site Visit:

After reviewing all of the provided documentation and equipment, proceed to conducting your initial site visit to familiarise yourself with the area and gather the following information: Box location:

Box ID:

Box distance from kerb (must be >1.5m):

Box conditio	on:	Yes	No
o rus	t holes		
o phy	vsical damage		
o ope	en doors		
	shocks or "tingles" when near couching the cabinet		
o oth	er condition issues noted		
	area can be created without pedestrian thoroughfare?	Yes	NP 10
Other hazar	ds Identified?	T CO	
HAZARD E	chanical / Electrical / Pressure / Temp		

Name:

Signature:

Date:



0

PART 2

Painting Procedures



What you need to know; tasks, steps and control measures.

Work Activity: Painting a Traffic Signal Box or Energex Padmount Transformer	Related Risk Assessment: On-site painting
Artforce Brisbane provides:) Program participant to provide:
 High visibility safety vest Safety cones x 4 (TSB) x 6 (EPT) High quality water-based paint – primer, colours and UV clear coat Mixing containers x 4 Mixing palette Paint prep cleaning agent Masking tape Drop sheets x 4 (TSB) x 6 (EPT) Tack cloth Rags x 2 Sanding block Scraper Glue removal product Sandpaper Artforce Brisbane Manual – document folder containing Information Sheets: Induction Form Painting Procedures Emergency Procedures Safety Information - Risk Assessment Pre-Start Safety Checklist Site Set-up Diagram Manual Handling Guide Covid 19 Direction Incident Report Form Weather Check (Resene flyer) Colour Mixing Guide Light Sensor Information Sticker Removal Documenting Your Artwork Photo Guide Image Release Form Insurances – Public Liability & Personal Accident Authority to Paint Notice Feedback Survey 	 Paint brushes Water and container/s for cleaning box and brushes Low seat, safety stool and/or small (2 or 3 step) ladder if available Hand trolley if available Sun safety gear: wide brimmed hat, long sleeve shirt and trousers, closed shoes, sunscreen, sunglasses. Water for drinking and snacks/food Basic first aid kit which includes bandages, insect repellent and an antidote for bites/stings

Artforce Brisbane t-shirt

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TASK	STEPS – WHAT TO DO	RELATED CONTROL MEASURES
Undertake a pre-painting site visit to inspect your box and prepare for painting	 Confirm the box ID number and address location. Ensure the box is located at least 1.5 metres from the kerb. If the box is less than 1.5 metres from the kerb, stop work and contact the Artforce Brisbane Coordinator. Ensure the box is in good condition - check for rust holes, physical damage, open doors or any shocks or 	• Some boxes may be only partially painted as a top section has been added since painting. You will need to paint the complete box.
	"tingles" when near or touching the cabinet. If any of the above are present, stop work and contact the Artforce Brisbane Coordinator asap.	
	• Make note of how many sides of the box require painting. For example, some boxes are located close to a fence or hedge, preventing access and views to the rear face of the box. Inspect the area around the box. Consider how you will set up your work area, ensuring that the pedestrian thoroughfare is not blocked.	
	• You may wish to take some site photos for your reference.	
	• Familiarise yourself with the nearest amenities. The following website is a helpful resource in locating public amenities: https://toiletmap.gov.au/	
	• Plan where you will park your vehicle if driving to site and how you will be transporting your materials to site hand trolley, support person, multiple trips, etc.	
	Complete and submit your Safety Induction Form.	
Plan your painting day	• Consider time of day to paint eg not peak hour; early morning or late afternoon to avoid the heat of the day. You may want to plan your painting around the movement of the sun (e.g. work on the western and northern side of the box in the morning, and work on the eastern and southern sides in the afternoon).	 It is important to keep the screw tops of the paint tins clean and free of paint. Otherwise they will stick shut when the paint dries.
	• Mix your paint colours before travelling to site. Refer to the Colour Mixing Guide Information Sheet . Thoroughly mix paints to ensure any settled pigment is redispersed before using.	
Wear appropriate protective gear	• Participants must wear a high visibility safety vest while working. Head, eye, and hand protection are strongly recommended for safety but are not required.	
	 Wear appropriate sun protection: long sleeve shirt and trousers, closed shoes, wide-brimmed hat, sunscreen. 	



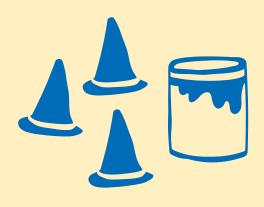
TASK	STEPS – WHAT TO DO	RELATED CONTROL MEASURES
Set up your work area	 Use safety cones to define your work area. Cover the space within your work area with drop sheets. Ensure materials and equipment are placed within the work area where they will not be a trip hazard. Display the Work-in-Progress Notice. Do not block the footpath while painting your signal box. Pedestrian traffic must be maintained at all times. Follow safe lifting techniques at all times. Use a two person lift or trolley where available; otherwise bend your knees (not your back) and use your leg and abdominal muscles to lift objects. 	 Do not allow anyone other than yourself (the contracted participant) and authorised helper(s) to cross the safety boundary into the work area. It is recommended that you do not have any more than two people painting the box at one time. If necessary, work in alternating shifts. People not painting the box should stand well clear of the defined work area. Ensure paint pots have lids on them when not directly in use & are on level ground. Keep your Authority to Paint Notice on you at all times.
Prepare the box	 If the box is already painted with an artwork design, lightly sand the surface with the sanding block, applying even pressure. The aim is to just dull the existing paint surface so the new primer and paint can better adhere. There is no need to remove the existing paintwork. Remove the Council applied 'NO POSTERS' stickers, as well as any other non-official stickers, using the supplied scraper and glue removal product (Orange Oil). Use supplied sandpaper if necessary. Clean the surface of the box with Resene Paint Prep and Housewash (diluted 1:4 in water) using a rag, removing all oil, grease, dirt, loose rust, and loose paint. Then rinse thoroughly with plain water. Manually dry the surface of the box with a clean rag and allow to thoroughly air-dry. Directly before priming, use the tack cloth to thoroughly remove all dust and fine particles from the surface of the box. Use low-tack masking tape to mask off areas that must remain unpainted - identification plates, emergency contact phone numbers related to signal operations, hinges, handles, or any of the regulatory or other official notices. NOTE: this step (apart from masking) is not required for EPTs which are prepped by Council. An amount of primer has been supplied for EPTs to cover any instances of graffiti which may have occurred between Council priming and the commencement of painting. 	 Do not block or cover vents, keyholes, or light sensors. These are necessary for the ongoing operation of the signal box. Refer to the Light Sensor Information Sheet. Use Resene Paint Prep and Housewash in accordance with the Manufacturer's Product and Safety Data Sheets.



TASK	STEPS – WHAT TO DO	RELATED CONTROL MEASURES
Prime the box	 Thoroughly mix the white primer paint to ensure any settled pigment is redispersed before using. Apply a single coat of white primer (undercoat) to all sides of the box that are to feature artwork. Allow to dry. The primer dries to the touch in 30 minutes, and can be recoated in 1 hour. Participants or their designated 'watchers' must remain at the site with safety cones in place until paint and coatings have cured to touch or are otherwise safe for public exposure. NOTE: this step is not required for EPTs which are primed by Council. Some primer is included in the EPT equipment box for the removal of any recent graffiti. 	 Use only the paint supplied. Apply Zinsser Smart Prime paint in accordance with the Manufacturer's Product and Safety Data Sheets. Apply only when air, material, and surface temperatures are between 10-32°C and the relative humidity is below 85%. NOTE: Artwork is to feature on all accessible sides of the box and not on the top face of the box.
Paint the artwork	 Thoroughly mix paints to ensure any settled pigment is redispersed before using. Apply the colour top coat/s in accordance with your approved artwork design. A single coat only is required, although blue may require a second coat. Allow to dry. Minimum drying time is specified as 45mins at 180°C. Minimum recoat time is specified at 2 hours. Participants or their designated 'watchers' must remain at the site with safety cones in place until paint and coatings have cured to touch or are otherwise safe for public exposure. 	 Use only the paint supplied. Apply Resene colour paints in accordance with the Manufacturer's Product and Safety Data Sheets. Allow paint to dry thoroughly between coats or layers unless you are blending wet- in-wet for a particular effect.
Sign the artwork	 Select an appropriate area within the artwork to feature your signature. Paint your signature. If your artwork design was produced in consultation with a community group, you may wish to include an acknowledgement – please seek approval for this wording before painting. 	Signatures can be no bigger than 30 x 10cm (actual size) on the box and may include the copyright symbol ©.
Apply UV Clearcoat	 Thoroughly mix the UV Clearcoat to before using. Apply two coats of UV Clearcoat to all sides of the box that feature artwork. Do not apply in direct hot sunlight. Allow to dry between coats. Minimum drying time is specified as 45mins at 180°C. Participants or their designated 'watchers' must remain at the site with safety cones in place until paint and coatings have cured to touch or are otherwise safe for public exposure. 	 Use only the paint supplied. Apply Resene UV Clearcoat in accordance with the Manufacturer's Product and Safety Data Sheets.

TASK	STEPS – WHAT TO DO	RELATED CONTROL MEASURES
Clean up	• Use rags to clean up any paint spills. Once the paint is dry these can be disposed of in a rubbish bin.	Clean up spills while still wet and easy to remove.
	• The site must be left clean and tidy. All paint spillage onto footpath or surrounding areas must be cleaned up immediately.	Do not wash paint into storm water drains.
Take regular breaks	 When leaving the site for breaks, ensure the site is clean and tidy, take all valuables with you. To ensure security for your materials and tools, you may wish to keep a line of sight to your work area or leave a 'watcher' to mind the site. Plan to remove all working materials and equipment overnight. 	♥ For personal health and safety, be sure to hydrate frequently and wear sun protection (wide-brimmed hat, long-sleeved shirt and trousers, closed shoes, sunglasses, sunscreen). Take regular rests or meal breaks in shady areas. Carry a first aid kit which includes bandages, insect repellent and an antidote for bites/stings and use as required.
Report Incidents	 Report any incidents, near misses, dangerous events, serious bodily injuries, or work-caused illnesses to Artforce Brisbane. Serious or major events must be reported to Artforce Brisbane by phoning 0428 095 939 as soon as possible. Please report all incidents, critical and non-critical, by completing the Incident Report Form and returning to Artforce Brisbane via the returned Equipment Pack, email or post. 	
Recover the site	Remove all materials, equipment, and any paint residues from the working area. Leave the site in a clean and tidy state.	
Dispose of waste	 Do not dump excess paint, paint residue or paint- water into the city sewer system or into the grass or soil around the box. Remove your paint waste and dispose of properly; consult the following for locations: https://recyclingnearyou.com.au/paint/ BrisbaneQLD NOTE: You can place empty paint tins with minimal paint residue in your recycling bin. 	
Take photos of your completed artwork	 As a minimum, take at least one photograph of each side of the box taken 'straight on' and two 'angled' photographs showing front+side and back+otherside to properly document the work. Additional photost of work-in-progress and/or context views are welcome. Refer to the Documenting Your Artwork Photo Guide Information Sheet and the Image Release Form for further information. Submit photos to the Artforce Brisbane Coordinator. 	

TASK	STEPS – WHAT TO DO	RELATED CONTROL MEASURES
Return Materials	 Return all materials (less paint) and the equipment pack/s to the local Ward Office within 7 days. Refer to the Induction Form for a materials check-list. Ensure materials are clean, in good condition, packed neatly, and are ready for use by the next Artforce Brisbane participant. 	Please ensure supplied Orange Oil has a fully locked lid and is placed in the zip lock bag provided. Place in the equipment pack in an upright corner position.
Complete a feedback survey	Complete the online Feedback Survey.	









Emergency Procedures

What you need to know; steps and key contact information.

Work Activity: Painting a Traffic Signal Box or Energex Padmount Transformer

Related Risk Assessment: On-site painting

EMERGENCY	STEPS (This includes what to do and related control measures)	KEY CONTACT
 Vehicle accident Electrical fault Severe weather - storm, flooding Fire Civil disturbance 	 In an emergency situation follow these instructions: Stop work IMMEDIATELY Assist anyone in the area who may not be familiar with the emergency procedures Alert the appropriate emergency service authority Proceed to a safe location and remain there until Emergency Services arrive Cooperate with those responding to the emergency and follow their instructions DO NOT delay leaving the work area by looking for belongings or other people DO NOT obstruct fire hydrants or the responding fire / rescue 	 EMERGENCY SERVICES Police, Fire Brigade, Ambulance Phone: 000 Poisons Centre Phone: 13 11 26 Artforce
Medical emergency	 workers and their equipment DO NOT re-enter the work area until instructed to do so by Emergency Services Notify Artforce Brisbane by phone and text message. In the event of a person being injured: Stabilise the person and administer first aid (if competent to do so) Phone an ambulance (depending on the extent of the injuries) Notify Artforce Brisbane by phone and text message as soon 	Coordinator Phone: 0428 095 939
Emergency road works	 as practicable. You must immediately make way for any emergency road works related to road safety and/or maintenance of the signal box. Remove all painting equipment as soon as safely possible and at all times comply with all instructions relating to safety and maintenance given by authorised workers. Notify the Artforce Coordinator by phone and text message as soon as it is safe to do so. 	
Emergency on or around the signal box site	 In the event of an emergency on or around the signal box site, you are required to remove all painting equipment as soon as safely possible and at all times comply with all instructions relating to safety and maintenance given by authorised workers. Notify the Artforce Coordinator by phone and text message as soon as it is safe to do so. 	

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PART 4

Paint and Cleaner Product & Safety Data Sheets







A compilation of documents courtesy of paint suppliers.

Cleaning painted surfaces with Resene Paint Prep and Housewash

Resene Paint Prep and Housewash:

- Has a mild detergent so won't stain glass like some other surface cleaning products.
- Is excellent to use with a 3M scouring pad for cleaning around windows (use gloves though).
- Can be used with a soft brush in the same way you would clean a car.
- Can be used either to wash down a painted surface prior to painting or as part of a regular maintenance wash down.

The following photos demonstrate how it works:



1.Equipment you'll need



2. Mix ratio of
 1:4 parts of fresh
 water



3. Rinse the area to be washed.



4. Wash with the mix. A smaller brush or scouring pad are ideal for corners etc.

5. Leave to dry :)

For more information please visit: https://www.resene.com.au/products/Paint-Prep-Housewash.htm

Resene Paint Prep and Housewash (continued)

Resene Paint Prep and Housewash Safety Data Sheet

RESENE PAINT PREP & HOUSEWASH- CONCENTRATE

Resene Paints Ltd

Version No: 1.1 Safety Data Sheet according to HSNO Regulations Issue Date: **11/06/2020** Print Date: **11/06/2020** L.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier		
Product name RESENE PAINT PREP & HOUSEWASH- CONCENTRATE		
Synonyms	Not Available	
Other means of identification	Not Available	

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	9834	
Relevant identified uses	9834	

Details of the supplier of the safety data sheet

Registered company name	Resene Paints Ltd
Address	32-50 Vogel Street Wellington New Zealand
Address	
Telephone	+64 4 577 0500
Fax	+64 4 5773327
Website	www.resene.co.nz
Email	advice@resene.co.nz

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	0800 764766	+64 800 700 112
Other emergency telephone numbers	Not Available	+61 2 9186 1132

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification ^[1]	Eye Irritation Category 2, Chronic Aquatic Hazard Category 3, Skin Corrosion/Irritation Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria 6.3B, 6.4A, 9.1C		

Label elements

Hazard pictogram(s)	
SIGNAL WORD	WARNING

Hazard	statement(s)
--------	--------------

H319	Causes serious eye irritation.	
H412	Harmful to aquatic life with long lasting effects.	
H316	Causes mild skin irritation.	

Precautionary statement(s) Prevention

P273	P273 Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	

Precautionary statement(s) 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.

P332+P313 If skin irritation occurs: Get medical advice/attention.		
P337+P313 If eye irritation persists: Get medical advice/attention.		
Precautionary statement(s) Storage		
Not Applicable		
Precautionary statement(s) Disposal		
P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.	

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
13845-36-8	1-10	potassium tripolyphosphate
84133-50-6	1-10	alcohols C12-14 secondary ethoxylated

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay if pain persists or recurs. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop seek medical attention.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
 Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
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Advice for firefighters

Fire Fighting	► Alert Fire Brigade and tell them location and nature of hazard.	
Fire/Explosion Hazard	 ▶ Non combustible. May emit poisonous fumes. May emit corrosive fumes. 	

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Clean up all spills immediately. Control personal contact with the substance, by using personal protective equipment. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean- up.
Major Spills	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid unnecessary personal contact, including inhalation. DO NOT allow clothing wet with material to stay in contact with skin
Other information	

Conditions for safe storage, including any incompatibilities

Suitable container	Polyethylene or polypropylene container.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
RESENE PAINT PREP & HOUSEWASH- CONCENTRATE	Not Available Not Available		Not Available Not Available	
Ingredient	Original IDLH		Revised IDLH	
potassium tripolyphosphate	Not Available		Not Available	
alcohols C12-14 secondary ethoxylated	Not Available		Not Available	

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating Occupational Exposure Band Limit	
potassium tripolyphosphate	E	≤ 0.01 mg/m³
Notes:	Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro range of exposure concentrations that are expected to protect worker hea	cess is an occupational exposure band (OEB), which corresponds to a

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat.

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	 Safety glasses with side shields.
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. PVC. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.
Body protection	See Other protection below
Other protection	► Overalls.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Thin foamy, pale yellow, clear liquid		
Physical state	Liquid	Relative density (Water = 1)	1.03-1.05
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	11	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	97
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	105

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation.			
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'.			
Skin Contact	Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.			
Еуе	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.			
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.			
RESENE PAINT PREP & HOUSEWASH-	TOXICITY		IRRITATION	
CONCENTRATE	Not Available Not Available		Not Available	
	TOXICITY	IRRITATION		
potassium tripolyphosphate	Oral (rat) LD50: ~2000 mg/kg ^[2]	Eye: no adve	erse effect observed (not irritating) ^[1]	
		Skin: no adve	erse effect observed (not irritating) ^[1]	

alcohols C12-14 secondary	TOXICITY	IRRITATION	
ethoxylated	Not Available	Not Available	
Legend:	 Value obtained from Europe ECHA Registered Subst specified data extracted from RTECS - Register of Toxic 		ned from manufacturer's SDS. Unless otherwise
ALCOHOLS C12-14 SECONDARY ETHOXYLATED	Polyethers, for example, ethoxylated surfactants and po stabilize intermediary radicals involved. Human beings have regular contact with alcohol ethoxyl and other cleaning products. Alcohol ethoxylates are according to CESIO (2000) clas EO < 5 gives Irritant (Xi) with R38 (Irritating to skin) and EO > 5-15 gives Harmful (Xn) with R22 (Harmful if swall EO > 15-20 gives Harmful (Xn) with R22 (Harmful if swall EO > 15-20 gives Harmful (Xn) with R22 (Harmful if swall EO > 15-20 gives Harmful (Xn) with R22 (Harmful if swall EO > 15-20 gives Harmful (Xi) with R22 (Harmful if swall EO > 15-20 gives Harmful (Xi) with R22 (Harmful if swall EO > 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall EO = 16-20 gives Harmful (Xi) with R22 (Harmful if swall All are not included in Annex 1 of the list of dangerous st In general, alcohol ethoxylates (AE) are readily absorbe rats. For high boiling ethylene glycol ethers (typically triethyle Skin absorption: Available skin absorption data for trie glycol ethylene ether (TGEE) suggest that the rate of ab methyl ether having the highest permeation constant an	lates through a variety of industrial ar sified as Irritant or Harmful depending R41 (Risk of serious damage to eyes lowed) - R38/41 th R36/38 (Irritating to eyes and skin) substances of the Council Directive 6 d through the skin of guinea pigs and one- and tetraethylene glycol ethers): thylene glycol ether (TGBE), triethyle sorption in skin of these three glycol	nd consumer products such as soaps, detergents, g on the number of EO-units: s) 7/548/EEC I rats and through the gastrointestinal mucosa of ne glycol methyl ether (TGME), and triethylene
RESENE PAINT PREP & HOUSEWASH- CONCENTRATE & POTASSIUM TRIPOLYPHOSPHATE	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.		
POTASSIUM TRIPOLYPHOSPHATE & ALCOHOLS C12-14 SECONDARY ETHOXYLATED	No significant acute toxicological data identified in literal	ture search.	
Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	✓	Reproductivity	×
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

SECTION 12 ECOLOGICAL INFORMATION

RESENE PAINT PREP &	ENDPOINT TEST DURATION (IRATION (HR)	SPECIES		sc	SOURCE	
HOUSEWASH- CONCENTRATE	Not Available	Not Avai	able	Not Available Not Available		e Not Available		
	ENDPOINT	TEST DURA	FION (HR) SPE	CIES		VALUE	SOURCE	
ootassium tripolyphosphate	EC50	48		Crustacea		>100mg/L	2	
	EC50	96 Algae or other aquatic plants		69.2mg/L	2			
alcohols C12-14 secondary	ENDPOINT	TEST DU	IRATION (HR)	SPECIES	VALUE	sc	URCE	
ethoxylated	Not Available	Not Avai	able	Not Available	Not Availabl	e No	t Available	

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Inaredient

Bioaccumulation

- 17 -

	No Data available for all ingredients
Mobility in soil	
Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. DO NOT allow wash water from cleaning or process equipment to enter drains. Recycle wherever possible. Consult manufacturer for recycling option. Resene Paintwise accepts residual unwanted paint and packaging. See Resene website for Paintwise information. Or contact a Local Authority for the disposal information. Do not discharge the substance into the environment.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package.

The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

This substance is to be managed using the conditions specified in an applicable chock Standard							
HSR Number	Group Standard						
HSR002530	Cleaning Products (Subsidiary Hazard) Group Standard 2017						
POTASSIUM TRIPOLYPHOSPHAT	POTASSIUM TRIPOLYPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS						
New Zealand Approved Hazardous Substances with controls New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification		New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classificatio of Chemicals - Classification Data					
of Chemicals			New Zealand Inventory of Chemicals (NZIoC)				
ALCOHOLS C12-14 SECONDARY	FTHOXYLATED IS FOUND ON THE FOLLOWING RE	GULATO	RY LISTS				
New Zealand Approved Hazardous Substances with controls		New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classifica of Chemicals - Classification Data					
of Chemicals	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals		Zealand Inventory of Chemicals (NZIoC)				
Hazardous Substance Location Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.							
	Quantity beyond which controls apply for closed		Quantity beyond which controls apply when use occurring in open				

Hazard Class containers containers Not Applicable Not Applicable Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities	
Not Applicable	Not Applicable	

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AICS	Yes
Canada - DSL	Yes
Canada - NDSL	No (potassium tripolyphosphate; alcohols C12-14 secondary ethoxylated)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (alcohols C12-14 secondary ethoxylated)
Japan - ENCS	No (alcohols C12-14 secondary ethoxylated)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - ARIPS	No (alcohols C12-14 secondary ethoxylated)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	11/06/2020
Initial Date	28/09/2017

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average PC – STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LODE: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

Powered by AuthorITe, from Chemwatch.

Zissner[®] SmartPrime[®]

Water-based modified acrylic primer/sealer, stain killer and bond coat.

DESCRIPTION AND USES

Zinsser [®] SmartPrime[®] is a water-based modified acrylic primer/sealer, stain killer and bond coat. This product provides the characteristics of an oil-based product in an allpurpose water-based interior/exterior primer. SmartPrime was developed for professional and commercial applications, combining stain blocking power, fast-dry convenience, excellent flow and leveling, and excellent adhesion to glossy surfaces.

It is suitable for use on residential, institutional or commercial use in schools, hospitals, hotels, nursing homes, restaurants, etc. Apply to interior and exterior walls, ceilings, doors, trim, fascia, soffits, foundations, railings, and related paintable surfaces. SmartPrime adheres to wood, plaster, concrete, gloss enamels, hardboard, glass and tile.

For interior surfaces, apply to new and previously painted drywall, plaster, wood (pine, fir, cedar, redwood, plywood), metal (aluminum, stainless steel, galvanized metal), vinyl, PVC, fiberglass and masonry (stucco, concrete block, concrete, brick). For exterior surfaces, apply to new or previously painted wood (pine, fir, cedar, redwood, T-111, plywood, pressure-treated wood), hardboard, glass, metal (aluminum, stainless steel galvanized metal), PVC, rigid plastics, aluminum and vinyl siding, fiberglass and masonry (stucco, concrete block, concrete, brick).

SmartPrime penetrates to seal porous surfaces to provide a smooth and even finish so topcoat paints have better coverage and more consistent sheen. Smart Prime blocks stains from water, smoke, cedar or redwood bleed, grease, handprints, asphalt, crayon, graffiti and rust stains.

MPI #6, #39, #50, #137, #149 Certified*

PERFORMANCE CHARACTERISTICS

- Bonds to glossy surfaces without scuff sanding
- Formulated with proprietary stain-blocking resins
- Dried film is mold and mildew resistant
- Bonds to moderately chalky surfaces
- Dries in minutes, can be recoated in 1 hour

PRODUCTS

SKU	DESCRIPTION
249727	1 Quart
249728	5 Gallons
249729	1 Gallon

* Refer to the MPI website for the most current listing of MPI certified products.

PRODUCT APPLICATION

SURFACE PREPARATION

Surfaces should be clean, dry, sound and free of dust, dirt, excessive chalky material, grime, grease, oil, wax, mildew, wallpaper adhesive, or any contamination that may interfere with adhesion. If unsure of cleanliness, always wash surface with household ammonia and water solution, appropriate cleaning solution or solvent (do not use TSP as a cleaner). Remove any peeling and/or unsound coatings. Sand any remaining paint film edges smooth with the surface. Remove existing stains by washing, sanding, scraping, etc. Countersink exposed nail heads, spot prime and fill all nail holes and gouges with Ready-Patch[®] spackling compound or equally suitable material. Lightly sand exposed exterior wood with 80 to 100 grit sandpaper to remove loose or weathered wood fibers.

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-Approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

NEW DRYWALL

New drywall must be wiped down with a damp cloth to remove residual joint compound dust prior to priming.

PLASTER & CONCRETE

New plaster must age 30 days before application of SmartPrime. Concrete, plaster, masonry and related surfaces must be fully cured before priming.

DAMAGED DRYWALL

Damaged drywall should be repaired prior to priming. Spot prime area of torn drywall facing paper or exposed gypsum core with $GardZ^{\textcircled{B}}$ Problem Surface Sealer and then skim coat with drywall mud before priming the total area with SmartPrime.

Zissner[®] SmartPrime[®] (continued)

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION (cont.)

MOLD & MILDEW

Remove interior mildew stains by washing the surface with a solution of one cup household bleach in a gallon of water. Follow label instructions and personal protection recommendations on the MSDS. Do not add ammonia or other cleaning products to the bleach solution. Kill exterior mildew with Jomax[®] House Cleaner and Mildew Killer. If concerned about mold and mildew behind walls, underneath flooring, in ventilation systems or other unseen areas, contact a professional who specializes in mold and mildew remediation. For commercial buildings and schools, follow appropriate guidelines for mold removal.

STAINS

Remove existing stains by washing, sanding, scraping, etc. Water stains, stains from water-based markers and smoke stains should be primed with B-I-N Primer/Sealer. Nicotine stains should be primed with Cover-Stain[®].

STAIN BLOCKING

Blocks stains from water, smoke, cedar or redwood bleed, grease, handprints, asphalt, crayon, graffiti and rust stains. Make sure all water leaks are repaired before applying SmartPrime to a water stain. If the area requires patching, apply SmartPrime before and after applying the spackling or patching compound. After applying SmartPrime to the stain, the stain may appear in the primer film. This is normal. The stain will be locked in the primer film and will not bleed into the topcoat. Allow 2 hours to dry for interior stain blocking and overnight for bare cedar or redwood. Certain applications may require a second coat of primer. Prime severe water and smoke stains and block associated odors with Zinsser B-I-N Shellac Base Primer Stain Blocker.

METAL SURFACES

Use SmartPrime to prime uncoated ferrous metals, galvanized metal, aluminum, or previously painted ferrous metals.

WOOD

Lightly sand exposed exterior wood with 80-100 grit sandpaper to remove loose or weathered wood fibers. For new Cedar and Redwood applications, allow SmartPrime to dry 24 hours before painting or topcoating. Sand interior bare wood surfaces using medium to fine grit sandpaper.

LIMITATIONS

Smart Prime is not recommended for application to floors, decks, roof surfaces or any surface subject to immersion or prolonged contact with water.

PRODUCT APPLICATION (cont.)

APPLICATION

Apply only when air, material, and surface temperatures are between 50-90°F (10-32°C) and the relative humidity is below 85%. Substrate moisture should not exceed 12%. Thoroughly mix to ensure any settled pigment is redispersed before using. In most cases only one coat is necessary to prime most surfaces. If excessive absorption occurs over very porous substrates a second coat may be necessary. Spot priming is recommended only under highhiding topcoat finishes. For best results, prime entire surface before painting. Keep container closed when not in use. Apply with a synthetic (nylon, polyester or blend) bristle brush, roller, or airless sprayer. Follow manufacturer's instructions when using spray equipment. For airless spraying use a .017" tip at 2000 to 2500 psi. If a conventional sprayer is used, spray at 50-60 psi. Wear NIOSH approved respirator and provide adequate ventilation.

THINNING

If thinning is necessary, add no more than 10 fluid ounces of clean water per gallon and mix thoroughly. Thinning the primer may affect its stain-blocking properties.

TINTING

SmartPrime may be tinted with up to 2 ounces of universal colorant per gallon. Tinting the primer toward the color of the topcoat helps hide in one coat. For mid or deep tone colors use Bulls-Eye 1-2-3 Deep Tint. Note: The addition of universal colorant may prolong the dry time of this product.

DRY TIME

Dries to the touch in 30 minutes, can be recoated in 1 hour. The primer film develops full adhesion and hardness after it cures in 7 days. Lower temperatures, higher humidity, and the addition of tint will prolong dry and cure time. Allow more time at cooler temperatures.

CLEAN-UP

Clean up spills and paint drips with detergent and warm water. If spills or drips have dried, use denatured alcohol or ammoniated detergent to soften and remove primer. Wash application tools in detergent and warm water immediately use. Follow equipment manufacturer's directions to clean spray equipment. Dispose of unused or unwanted product in accordance with local laws regulating water-based coatings.

Zissner[®] SmartPrime[®] (continued)

PHYSICAL PROPERTIES

		SMARTPRIME			
Resin Type		Water-based Acrylic			
Pigment Type		Titanium Dioxide			
Solvents		Water, Glycol Ethers			
Weight	Per Gallon	10.8 lbs.			
weight	Per Liter	1.29 kg			
Solids	By Weight	50.9%			
301103	By Volume	35.2%			
Volatile Organic Comp	ounds	<25 g/l (0.21lbs/gal.)			
Recommended Dry Fili	n	1.0-1.5 mils			
Thickness (DFT) per C	oat	(25-37.5µ)			
Wet Film to Achieve DI	FT (Unthinned	3.0-4.0 mils			
material)		(75-100µ)			
Practical Coverage at Recommended		Approximately 400 sq.ft./gal. (9.8 m ² /l)			
DFT (assume 15% mate	erial loss)	depending on application method and surface porosity			
Dry Times at 70-80°F	Touch	30 minutes			
(21-27°C) and 50%	Recoat	1 hour			
Relative Humidity	Full Cure	7 days			
Shelf Life		5 years			
Flash Point		>200°F (93°C)			
Flame Spread (ASTM-84-97A)		Class A			
Smoke Contrib. (ASTM-84-97A)		Class A			
Storage		Store indoors at 40-90°F (4-32°C)			
Safety Information		For additional information, see SDS			

Calculated values are shown and may vary from the actual manufactured material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.

Zissner[®] SmartPrime[®] (continued)

Zissner[®] SmartPrime[®] Safety Data Sheet

Safety Data Sheet

www.rustoleum.com.au

1. Identification **Product Name:** ZINSSR 1L 6PK AUS SMART PRIME **Revision Date:** 5/21/2019 Name on Label: Smart Prime Supercedes Date: 11/1/2018 Product Identifier: 259336 Product Use/Class: Primer/WB Acrylic Rust-Oleum Australia & New Zealand Pty **Rust-Oleum Corporation** Supplier: Manufacturer: 11 Hawthorn Parkway Ltd 8 Lakeview Drive Vernon Hills, IL 60061 Scoresby, Melbourne, Victoria 3179 USA Australia Ph 1 300 784 476

Emergency Telephone: 24 Hour Hotline: 1-300-366-961

Regulatory Department

2. Hazard Identification

This product is not classified as a Dangerous Good per the Australian Code for the Transport of Dangerous Goods by Road and Rail. This product was assessed per Safe Work Australia criteria.

Classification

Preparer:

Symbol(s) of Product

Not a hazardous substance or mixture per Safe Work Australia criteria.

Signal Word

No Signal Word has been assigned.

Possible Hazards

24% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES				
Chemical Name	CAS-No.	<u>Wt.%</u> Range	GHS Symbols	GHS Statements
Titanium Dioxide	13463-67-7	10-25	Not Available	Not Available
Hydrous Magnesium Silicate	14807-96-6	10-25	Not Available	Not Available
Barium Sulfate	7727-43-7	2.5-10	GHS07	H332
Zinc Oxide	1314-13-2	0.1-1.0	Not Available	Not Available
2,4,7,9-Tetramethyl-5-Decyne-4,7-Diol	126-86-3	0.1-1.0	GHS05-GHS07	H302-312-317-318
Ethylene Glycol	107-21-1	0.1-1.0	GHS07	H335

Zissner[®] SmartPrime[®] Safety Data Sheet (continued)

The balance of the product is Nonhazardous.

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

ADG HAZCHEM CODE: Not Hazardous

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containersDispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing. Avoid contact with eyes. **STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep from freezing. Keep container closed when not in use.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	WHS WES TLV-TWA	WHS WES TLV-STEL
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.
Hydrous Magnesium Silicate	14807-96-6	15.0	2 mg/m3	N.E.
Barium Sulfate	7727-43-7	5.0	5 mg/m3	N.E.
Zinc Oxide	1314-13-2	1.0	2 mg/m3	10 mg/m3
2,4,7,9-Tetramethyl-5-Decyne-4,7-Diol	126-86-3	1.0	N.E.	N.E.
Ethylene Glycol	107-21-1	1.0	25 ppm	50 ppm

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

Zissner® SmartPrime® Safety Data Sheet (continued)

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

-			
Appearance:	Liquid	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Specific Gravity:	1.317	pH:	N.D.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Miscible	Partition Coefficient, n-octanol/	
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	100 - 537	Explosive Limits, vol%:	N.A N.A.
Flammability:	Does not Support Combustion	Flash Point, °C:	94
Evaporation Rate:	Slower than Ether	Auto-ignition Temp., °C:	N.D.
Vapor Density:	Heavier than Air	Vapor Pressure:	N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

	•	•		
CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.
14807-96-6	Hydrous Magnesium Silicate	6000	N.E.	30
7727-43-7	Barium Sulfate	307000 mg/kg Rat	N.E.	N.E.
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.E.	N.E.
126-86-3	2,4,7,9-Tetramethyl-5-Decyne-4,7-Diol	>500 mg/kg Rat	>1000 mg/kg Rabbit	N.E.
107-21-1	Ethylene Glycol	4700 mg/kg Rat	10600 mg/kg Rat	N.E.

Zissner® SmartPrime® Safety Data Sheet (continued)

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information				
	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	<u>ADG</u>
UN Number:	N.A.	N.A.	N.A.	N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No
ADG Hazchem Code:	Not Hazardous			

15. Regulatory Information

Montreal Protocol

No Montreal Protocol components exist in this product.

Stockholm Convention

No Stockholm Convention components exist in this product.

Rotterdam Convention

No Rotterdam Convention components exist in this product.

MARPOL

This product contains the following substances listed under the MARPOL regulations:

Chemical Name	<u>CAS-No.</u>
Carbamic Acid, 1H-Benzimidazol-2-yl-, Methyl Ester	10605-21-7

SUSMP

This product contains the following substances classified as poisons as regulated by the Poisons Standard (SUSMP):

Chemical Name 3-lodo-2-Propynyl Butyl Carbamate Schedule Number(s) Schedule 5

Zissner® SmartPrime® Safety Data Sheet (continued)

Capital Territories Environmental	Regulations		
This product contains the following Regulation:	substances listed under th	e Australian Cap	ital Territories Environmental Protection
Chemical Name		Schedule	Schedule Name
Chlorite Mineral Carbamic Acid, 1H-Benzimidazol-2	-yl-, Methyl Ester	4 3	DOM - Disinfection By-products DOM - Pesticides
16. Other Information			
SDS REVISION DATE:	5/21/2019		
REASON FOR REVISION:	Product Composition Cha Substance and/or Produc 02 - Hazard Identification 15 - Regulatory Informat Revision Statement(s) Ch	ct Properties Cha 1 ion	anged in Section(s):
Legend: N.A Not Applicable N.D Not Determined N.E Not Established S.T.E.L Short Term Exposure Limit T.W.A Time Weighted Average W.E.S Workplace Exposure Standard W.H.S Work Health and Safety regulation			

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Resene Lumbersider Paint

Waterborne – Low Sheen

Resene Lumbersider is based on a tough 100% acrylic resin to ensure maximum durability in all exposed conditions. Imparts a natural low sheen look that is fully washable.

	PHYSICAL PROPERTIES
Vehicle type	100% acrylic
Pigmentation	Titanium dioxide/fillers
Solvent	Water
Finish	Low sheen
Colour	Selected Resene Total Colour System, including BS5252, Multi-Finish, Whites & Neutrals and The Range
Dry time (min)	45 minutes at 18°C
Recoat time (min)	2 hours
Primer required	Yes, dependent on surface
Theoretical coverage	12 sq. metres per litre
Dry film thickness	33 microns at 12 sq. metres per litre
Usual no. of coats	2; some colours may require an additional coat
Abrasion resistance	Very good
Chemical resistance	Good
Heat resistance	Thermoplastic
Solvent resistance	Good
Durability	Excellent
Thinning and clean up	Water
VOC	c. 35 grams per litre (see Resene VOC Summary)

Performance and limitations

PERFORMANCE

- Excellent adhesion to primed and natural substrates, timber, concrete and old paintwork.
- Excellent as a roof coating where a low sheen finish is required.
- May be used on surfaces that are to be used for the collection of drinking water.
- Low sheen, highly scrubbable wall paint.
- An Environmental Choice approved product.

LIMITATIONS

 Do not apply at temperatures below 10°C or when it is liable to drop below 10°C during the drying period. Resene Lumbersider (continued)

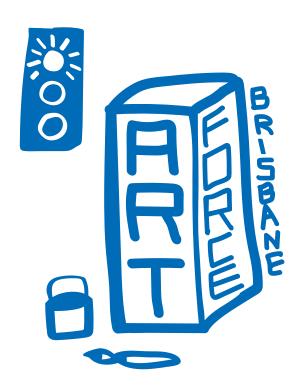
Surface preparation

• Clean down thoroughly to remove all dirt, dust and loose material. Ensure surface is free from oil, grease and mould.

Application

- Apply by brush, speed brush, synthetic fibre roller or spray.
- Apply two coats Resene Lumbersider allowing at least two hours between coats.

For more information please visit: www.resene.com View Data Sheets online at www.resene.com/datasheets.



Resene Lumbersider (continued)

Resene Lumbersider Safety Data Sheet

RESENE LUMBERSIDER

Resene Paints Ltd

Version No: 1.1 Safety Data Sheet according to HSNO Regulations Issue Date: **11/02/2020** Print Date: **11/02/2020** L.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier	
Product name	RESENE LUMBERSIDER
Synonyms	Incl. White, Pastel, Light, Mid, Deep, Ultra Deep, Ochre, Green, Black, Magenta, Light Grey, Winter Grade White, Yellow 2, Rich Red, Intense Red, Cool Black, HO Cool Black.
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses 10470 10330 10331 10332 10333 10334 10341 10342 10567 10345 10349 10415 10346 10347 10348 10580 8968

Details of the supplier of the safety data sheet

Registered company name	Resene Paints Ltd
Address	32-50 Vogel Street Wellington New Zealand
Telephone	+64 4 577 0500
Fax	+64 4 5773327
Website	www.resene.co.nz
Email	advice@resene.co.nz

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	0800 764766	+64 800 700 112
Other emergency telephone numbers	Not Available	+61 2 9186 1132

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture Classification [1] Acute Aquatic Hazard Category 3 1. Classified by Chernwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI Legend: Determined by Chemwatch using GHS/HSNO criteria 9.1D Label elements Hazard pictogram(s) Not Applicable SIGNAL WORD NOT APPLICABLE Hazard statement(s) H402 Harmful to aquatic life. Precautionary statement(s) Prevention P273 Avoid release to the environment. Precautionary statement(s) Response Not Applicable Precautionary statement(s) Storage Not Applicable Precautionary statement(s) Disposal P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation

SECTION 3 COMPOSITION	/ INFORMATION ON INGR	EDIENTS
Substances		
See section below for composition Ingredients are required	^{of Mixtures} d by the Hazard Substa	ances (Safety Data Sheets) Notice 2017 to be identified:
Mixtures		
CAS No	%[weight]	Name
25265-77-4	<2	2.2.4-trimethyl-1.3-pentanediol monoisobutyrate
SECTION 4 FIRST AID MEA	SURES	
Description of first aid measur	es	
Eye Contact	If this product comes in contact • Wash out immediately with • If irritation continues, seek • Removal of contact lenses	water.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Foeek medical attention in event of irritation.	
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. 	
Ingestion	 Immediately give a glass of First aid is not generally rec 	f water. quired. If in doubt, contact a Poisons Information Centre or a doctor.
Indication of any immediate m	edical attention and special t	treatment needed
Treat symptomatically.		
SECTION 5 FIREFIGHTING	MEASURES	
Extinguishing media		
Water spray or fog.		
Special hazards arising from the substrate or mixture		
Fire Incompatibility	 Avoid contamination with or 	xidising agents
	1	

Advice for firefighters

U U	
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	 Non Combustible. Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2) other pyrolysis products typical of burning organic material.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	Control personal contact with the substance, by using personal protective equipment. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean-up.
Major Spills	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE Precautions for safe handling Safe handling Avoid unnecessary personal contact, including inhalation. Other information Store in original containers. Conditions for safe storage, including any incompatibilities Suitable container Packaging as recommended by manufacturer. Storage incompatibility Avoid reaction with oxidising agents SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION Control parameters OCCUPATIONAL EXPOSURE LIMITS (OEL) INGREDIENT DATA Not Available EMERGENCY LIMITS Ingredient Material name TEEL-1 TEEL-2 TEEL-3 2,2,4-trimethyl-1,3-pentanediol Trimethyl-1.3-pentanediol monoisobutyrate, 2.2.4-; (Texanol) 13 ma/m3 140 ma/m3 840 ma/m3 monoisobutyrate Ingredient Original IDLH Revised IDLH 2,2,4-trimethyl-1,3-pentanediol Not Available Not Available monoisobutyrate MATERIAL DATA Exposure controls Appropriate engineering Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. controls Personal protection Safety glasses with side shields Eye and face protection Chemical goggles Skin protection See Hand protection below Wear general protective gloves, eq. light weight rubber gloves. Hands/feet protection The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Body protection See Other protection below Not usually required. Where the concentration of vapours in the breathing zone approaches or exceeds the "Exposure Standards" respiratory protection is required. Type A Filter of sufficient Respiratory protection capacity. Recommended material(s) **Respiratory protection** GLOVE SELECTION INDEX Selection of the Class and Type of respirator will depend upon the level of Glove selection is based on a modified presentation of the: breathing zone contaminant and the chemical nature of the contamina Forsberg Clothing Performance Index'. The effect(s) of the following substance(s) are taken into account in the *computer*-Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important. generated selection: RESENE LUMBERSIDER Maximum gas/vapour Required minimum concentration present in air p.p.m. Respirator Full-Face Respirator Material СРІ (by volume) A-AUS / PE/EVAL/PE A up to 10 1000 Class1 A-AUS / Class * CPI - Chemwatch Performance Index up to 50 1000 1 A: Best Selection up to 50 5000 Airline B: Satisfactory; may degrade after 4 hours continuous immersion up to 100 5000 A-2 C: Poor to Dangerous Choice for other than short term immersion up to 100 10000 A-3 NOTE: As a series of factors will influence the actual performance of the glove, a final . 100+ Airline** selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as 'feel' or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

* - Continuous Flow ** - Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Acrylic dispersion			
Physical state	Liquid	Relative density (Water = 1)	1.2-1.4
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	7-9	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	1000-1500
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	40-45
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	<50

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).			
Ingestion	The material has NOT been classified by EC Directives	or other classific	ation systems as 'harmful by ingestion'.	
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models).			
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).			
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.			
	1			
	тохісіту		IRRITATION	
RESENE LUMBERSIDER	Not Available		Not Available	
	тохісіту	IRRIT	ATION	
2,2,4-trimethyl-1,3-pentanediol	Dermal (rabbit) LD50: >15200 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]		
monoisobutyrate	Inhalation (rat) LC50: >5.325 mg/l/6h ^[2]	Eyes - Moderate irritant *		
	Oral (rat) LD50: 3200 mg/kg ^[2]	Skin -	Slight irritant *	

		Skin (rabbit): mild ***	
		Skin: no adverse effect o	bserved (not irritating) ^[1]
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		
2,2,4-TRIMETHYL- 1,3-PENTANEDIOL MONOISOBUTYRATE	1,3-PENTANEDIOL effects on fertility or total development seen in the ratio "(Swill-1)" [Lastman] "" [Perstop]		
Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
			not available or does not fill the criteria for classification le to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

RESENE LUMBERSIDER	ENDPOINT	TEST DURATION (HR)	TEST DURATION (HR)		VALUE		SOURCE
	Not Available	Not Available		Not Available	Not Available N		Not Available
	ENDPOINT	TEST DURATION (HR)	SPEC	IES		VALUE	SOURCE
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LC50	96	Fish	Fish		9.552mg/L	3
	EC50	48	Crusta	Crustacea		>19mg/L	2
	EC50	96	Algae	or other aquatic plants		0.789mg/L	3
	NOEC	72	Algae	Algae or other aquatic plants		2mg/L	2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data						

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (LogKOW = 2.9966)

Mobility in soil

Ingredient	Mobility
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (KOC = 22.28)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. DO NOT allow wash water from cleaning or process equipment to enter drains. Recycle wherever possible or consult manufacturer for recycling options. Consult manufacturer for recycling option. Resene Paintwise accepts residual unwanted paint and packaging. See Resene website for Paintwise information. Or contact a Local Authority for the disposal information. Do not discharge the substance into the environment.
------------------------------	--

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package.

The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled. The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO	
HAZCHEM	Not Applicable	

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017

2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification
IMO IBC Code Chapter 17: Summary of minimum requirements	of Chemicals
IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data
	New Zealand Inventory of Chemicals (NZIoC)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AICS	Yes
New Zealand - NZIoC	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	11/02/2020
Initial Date	15/03/2018

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Powered by AuthorITe, from Chemwatch.

Resene Clearcoat UVS Paint

Waterborne U.V. Protective Glaze

Resene Clearcoat UVS is based on a unique acrylic-urethane emulsion for ease of application and maximum life over painted surfaces.

Formulated with U.V. absorbers, Resene Clearcoat UVS filters out harmful U.V. light, protecting the underlying coloured coat. Ideally suited for direct application to freshly painted exterior bright organic hues and shades to aid colour retention by protecting these more vulnerable pigments against fading.

	PHYSICAL PROPERTIES
Vehicle type	Acrylic-urethane
Pigmentation	None
Solvent	Water
Finish	Gloss
Dry time (min)	45 minutes at 18°C
Recoat time (min)	2 hours
Primer required	No, always applied over prepainted surface
Theoretical coverage	12 sq. metres per litre
Dry film thickness	26 microns at 12 sq. metres per litre
Usual no. of coats	1
Abrasion resistance	Very good
Chemical resistance	Good
Heat resistance	Good
Solvent resistance	Good
Durability	Excellent
Thinning and clean up	Water
VOC	c. 59 grams per litre (see Resene VOC Summary)

Performance and limitations

PERFORMANCE

- Excellent U.V. protection of the underlying paint surface.
- Designed for application with excellent adhesion over Resene pigmented exterior waterborne topcoats.
- Acid and alkali resistant inhibits mould growth.
- An Environmental Choice approved product

LIMITATIONS

- Do not apply over solventborne paint finishes.
- Will not penetrate or reinforce weak surfaces.

Resene Clearcoat UVS (continued)

Surface preparation

- All freshly painted surfaces
- Ensure surface is clean and dry, free from dirt, dust and loose material, oil, grease and mould. Application

Application

Apply by brush, roller or airless spray.

For more information please visit: www.resene.com View Data Sheets online at www.resene.com/datasheets

Precautions

- Ensure the correct primer and/or sealer and topcoat is used.
- Do not apply in direct hot sunlight.
- Excessive film builds caused by spreading rates lower than those recommended may cause undesirable milkiness.
- Galvanised steel and Zincalume must be primed and painted before application of Resene Clearcoat UVS.

BELOW - Inside of Resene Clearcoat brochure

net contents 1 litre LL28401B 4/14

WARNING

Read label before use. Keep out of reach of children. Harmful if swallowed. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. PRECAUTIONS

DO NOT BREATHE FUMES/MISTS/SPRAYS/VAPOURS.

Store in original or correctly labelled container, tightly closed, in a well ventilated area indoors, away from foodstuffs, either Wear protective gloves/protective clothing/elve protective. Jobsev of empty container safely. Consult Resene checklist on environmentally acceptable methods for cleaning equipment and disposing of unwanted paint.

FIRST AID

IF SWALLOWED: Rinse mouth. Seek medical attention immediately. Further information available on the SDS.

IF INHALED: If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

IF ON SKIN (or hair): Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation

IF IN EYES: If this product comes in contact with the eyes, wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. When seeking medical advice take this container with you.

Further information can be obtained from AUST: POISONS INFORMATION CENTRE 131 126

or call Resene 1800 738 383.

NZ: NATIONAL POISONS CENTRE 0800 POISON (764 766) or call Resene 0800 737 363.

CONTAINS: UV Absorbers 10-15 gms/L, Fungicide < 10 gms/L. For use as a decorative/protective coating.

For full technical instructions see Data Sheet D502

SPILLS: Wear appropriate protective clothing. Absorb with sand or earth. Collect and seal in properly labelled drums. Do not allow to enter drains or to run off into waterways. Refer to local waste management authority.

CLEANING PAINT EQUIPMENT: Brush/roll out as much paint as possible onto newspaper before washing brushes and rollers. Dispose of wash-up water onto grassy/unsealed area or into inside sink/basin, NOT into outside stormwater drain where it may harm fish in local waterways.

Resene Clearcoat UVS is based on a unique acrylic-urethane for ease of application and maximum life over painted surfaces. Formulated with U.V. absorbers, Resene Clearcoat UVS filters out harmful U.V. light, protecting the underlying coloured coat. Ideally suited for direct application to freshly painted bright organic hues and shades to aid colour retention by protecting these more vulnerable pigments against fading.

Preparation

• Ensure surfaces to be painted are in sound condition, dry, free from dirt, dust and loose material.

 Oil and grease must be removed using Resene Paint Prep and Housewash (see Data Sheet D812). If mould is present, treat with Resene Moss & Mould Killer (see Data Sheet D80). Efflorescence on masonry must be treated (see Data Sheet D83).

All sanding dusts may be harmful and appropriate protection must be worn. In particular dusts from old lead or chromate based paints or old asbestos containing building materials may be injurious to health if inhaled or ingested. Seek expert advice if the presence of these materials is suspected.

This product may be used to paint a wide variety of surfaces. If the surface you propose to paint is unsound or not referred to, contact your local Resene ColorShop or Reseller.

Application

To avoid foaming of material, do not shake and do not brush excessively. Stir well with a wide flat stirrer prior to application.
Allow at least two hours between coats.

- Do not apply in direct sunlight. Do not apply over solventborne paint finishes.

Not recommended for exterior tile or decorative aggregate flooring where ponding occurs.

Maintenance

(after a minimum of four weeks' drying)

See the Resene Caring for your paint finish brochure or the Resene website for full cleaning instructions. **Be PaintWise**

For tips on minimising the impact of your decorating on the environment see the Resene website.

Please ensure that use of this product is compatible with the substrate and surface preparation method and that the colour in this container is the same as selected. Resene does not accept any responsibility for the <u>application</u> of incorrect product to substrate. For further painting advice and information, call 1800 738 383 (AUST), 0800 737 363 (NZ) or visit the Resene website.

Quick check

Use on: Exposed colours that may be prone to fading. Not for use on opening sashes and doors. Do not apply over solventborne paint finishes. Gloss level: Gloss.

Coverage: 12 square metres per litre per coat. Coverage will vary dependent upon surface porosity and profile.

and profile. Dry time (minimum): 45 minutes at 18°C. Do not apply at temperatures below 10°C or when temperatures are liable to drop below this during the drying period. Drying is slowed by low temperatures and high humidity. Do not apply under damp conditions. Recoat time (minimum): 2 hours. Usual number of coats: 1. Application method: Brush, roller (Resene No.10 Waterborne Clears sleeve) or airless spray. Thinning and clean up: Water. In hot conditions may be thinned with up to 5% Resene Hot Weather Additive to slow drying. Colour range: Clear. Before use: Stir well with a wide flat stirrer. Faivy the Resene Promise of guality on period

C: Street ene Promise of quality on provide the second website for a copy. Second that the appropri-second cation. Enjoy the Resene website for a co or the Resene website for a co In every case it is recommend Sheet are consulted prior to a



the paint the professionals use

In Australia: Resene Paints (Aust) Limited 7 Production Ave, PO Box 924, Beenleigh, Old 4207 Phone 1800 738 383 Fax 1800 064 960 Email advice@resene.com.au or visit www.resene.com.au In New Zealand: Resene Paints Limited Vogel Street, PO Box 38242, Wellington Mail Centre, Lower Hutt 5045 Phone (04) 577 OSOD Fax (04) 577 OSOD Email advice@resene.co.nz or visit www.resene.co.nz

Manufactured under a quality system, certified as complying with ISO9001 by Telarç SAI, an accredited certification body. Printed on environmentall résonsible pager, which meets with the reduirements of environmental management system EMAS. Printed using UV. inks ensuring no emissions.

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Resene Clearcoat UVS (continued)

Resene Clearcoat UVS Safety Data Sheet

RESENE CLEARCOTE UVS

Resene Paints Ltd

Version No: **3.7** Safety Data Sheet according to HSNO Regulations Issue Date: **28/04/2020** Print Date: **30/04/2020** L.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier	
Product name	RESENE CLEARCOTE UVS
Synonyms	Not Available
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	9790	
Relevant identified uses	9790	

Details of the supplier of the safety data sheet

Registered company name	Resene Paints Ltd	
Address	32-50 Vogel Street Wellington New Zealand	
Telephone	+64 4 577 0500	
Fax	+64 4 5773327	
Website	www.resene.co.nz	
Email	advice@resene.co.nz	

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	0800 764766	+64 800 700 112
Other emergency telephone numbers	Not Available	+61 2 9186 1132

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification [1]	Acute Aquatic Hazard Category 3, Skin Sensitizer Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	6.5B (contact), 9.1D

Label elements

Hazard pictogram(s)	(!)
SIGNAL WORD	WARNING

.....

Hazard etatement(e)

H402	Harmful to aquatic life.
H317	May cause an allergic skin reaction.

Precautionary statement(s) Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P321	P321 Specific treatment (see advice on this label).	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
25265-77-4	1-5	2.2.4-trimethyl-1.3-pentanediol monoisobutyrate
41556-26-7	0.1-0.5	bis(1.2.2.6.6-pentamethyl-4-piperidyl)sebacate
Not Available	1-5	benzotriazol derivatives

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Vash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents

Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	 Non combustible. Burning release: carbon dioxide (CO2) other pyrolysis products typical of burning organic material. May emit poisonous fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for cont	ainment and cleaning up
Minor Spills	Control personal contact with the substance, by using personal protective equipment. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Clean area with large quantity of water to complete clean- up.
Major Spills	Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear appropriate personnel protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eyes contact. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sawdust, sand, earth, inert material or vermiculite then place in suitable, labelled container for waste disposal. Wipe up. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid unnecessary personal contact, including inhalation. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container	Packaging as recommended by manufacturer.
Storage incompatibility	Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3	
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Trimethyl-1,3-pentanediol monoisobutyrate, 2,2,4-; (Texanol)		13 mg/m3	140 mg/m3	840 mg/m3	
Ingredient	Original IDLH	ginal IDLH Revised ID		IDLH		
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available	Not Available				
bis(1,2,2,6,6-pentamethyl- 4-piperidyl)sebacate	Not Available	Not Available				

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
bis(1,2,2,6,6-pentamethyl- 4-piperidyl)sebacate	D	> 0.1 to ≤ 1 ppm	
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.		

MATERIAL DATA

1,2-Benzisothiazoline-3-one (BIT) produces sensitising effects and causes skin irritation at concentrations of 0.05%.

CEL TWA: 0.1 mg/m3; STEL 0.3 mg/m3 total isothiazolinones (Rohm and Haas)

(CEL = Chemwatch Exposure Limit) for dipropylene glycol monomethyl ether:

The TLV-TWA and STEL recommendations were thought to be sufficiently low to prevent objectionable irritation and provide a considerable safety factor against CNS impairment.

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.	
Personal protection		
Eye and face protection	► Safety glasses with side shields.	
Skin protection	See Hand protection below	

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Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. NOTE: The material may produce skin sensitisation in predisposed individuals. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Butyl rubber gloves Nitrile rubber gloves (Note: Nitric acid penetrates nitrile gloves in a few minutes.)
Body protection	See Other protection below
Other protection	

Respiratory protection

Not usually required. Where the concentration of vapours in the breathing zone approaches or exceeds the "Exposure Standards" respiratory protection is required. Type A Filter of sufficient capacity.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear to hazy colourless viscous liquid		
Physical state	Liquid	Relative density (Water = 1)	1.01-1.03
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	8-9	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	680
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	69
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	59

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▶ stable.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'.
Skin Contact	Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

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Chronic	Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals. Benzotriazol derivatives are known contact sensitisers.			
RESENE CLEARCOTE UVS	TOXICITY IRRITATION Not Available Not Available			
	TOXICITY Dermal (rabbit) LD50: >15200 mg/kg ^[2]			
2,2,4-trimethyl-1,3-pentanediol	Inhalation (rat) LC50: >5.325 mg/l/6h ^[2]	Eye: no adverse effect ob Eyes - Moderate irritant *	served (not imitating). 1	
monoisobutyrate	Oral (rat) LD50: 3200 mg/kg ^[2]	Skin - Slight irritant * Skin (rabbit): mild ***		
		Skin: no adverse effect of	oserved (not irritating) ^[1]	
bis(1,2,2,6,6-pentamethyl- 4-piperidyl)sebacate	TOXICITY IRRITATION Oral (rat) LD50: 3100 mg/kg ^[2] Not Available			
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances			
2,2,4-TRIMETHYL- 1,3-PENTANEDIOL MONOISOBUTYRATE	Not a skin sensitiser (guinea pig, Magnusson-Kligman) *** effects on fertility or foetal development seen in the rat *** The material may be irritating to the eye, with prolonged or The material may cause skin irritation after prolonged or n	* [SWIFT] ** [Eastman] *** [Persto ontact causing inflammation.	[qq	
RESENE CLEARCOTE UVS & BIS(1,2,2,6,6-PENTAMETHYL- 4-PIPERIDYL)SEBACATE	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema.			
Acute Toxicity	×	Carcinogenicity	×	
Skin Irritation/Corrosion	×	Reproductivity	×	
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×	
Respiratory or Skin sensitisation	✓	STOT - Repeated Exposure ×		
Mutagenicity	X	Aspiration Hazard	X	

SECTION 12 ECOLOGICAL INFORMATION

Toxicity										
	ENDPOINT		TEST DURATION (HR)		SPEC	IES	VALUE		SOUF	RCE
RESENE CLEARCOTE UVS	Not Available Not Available		Not Available	Not Available		vailable	Not Available		Not Available	
	ENDPOINT	TE	ST DURATION (HR)	SPECI	ES			VALUE		SOURCE
	LC50	96		Fish	Fish		9.552mg/L		3	
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	EC50	48		Crustacea		>19mg/L		2		
meneloopalyrate	EC50	96		Algae or other aquatic plants		0.789mg/L		3		
	NOEC	72		Algae or other aquatic plants 2mg/L 2			2			
bis(1,2,2,6,6-pentamethyl-	ENDPOINT	TEST DURATION (HR)	R)		SPECIES VALUE			so	URCE	
4-piperidyl)sebacate	LC50 96 Fish =0.34mg/L 1									
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data									

for propylene glycol ethers: Environmental fate: Most are liquids at room temperature and all are water-soluble. The isothiazolinones are very toxic to marine organisms (fish, Daphnia magna and algae) The high water solubility and low log Kow values of several chlorinated and non-chlorinated indicate a low potential for bioaccumulation. DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air				
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW	LOW				
Bioaccumulative potential						
Ingredient	Bioaccumulation					
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (LogKOW = 2.9966)					
Mobility in soil						
Ingredient	Mobility					
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (KOC = 22.28)					

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	 Containers may still present a chemical hazard/ danger when empty. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. DO NOT allow wash water from cleaning or process equipment to enter drains. Recycle wherever possible or consult manufacturer for recycling options. Resene Paintwise accepts residual unwanted paint and packaging. See Resene website for Paintwise information. Or contact a Local Authority for the disposal information. Do not discharge the substance into the environment.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Po	llutant NO
HAZ	CHEM Not Applicable

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard	Group Standard					
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017					
2,2,4-TRIMETHYL-1,3-PENTANEDIOL MONOISOBUTYRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS							
New Zealand Approved Hazardous Substances with controls New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification							

New Zealand Approved Hazardous Substances with controls	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification	of Chemicals - Classification Data
of Chemicals	New Zealand Inventory of Chemicals (NZIoC)

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Inventory of Chemicals (NZIoC)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class Quantity beyond which controls apply for closed containers		Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities					
Not Applicable	Not Applicable					
	not Applicable					
Refer Group Standards for further in	nformation					
Tracking Requirements						
Not Applicable						
Not Applicable						
National Inventory Status						
National Inventory	Status					
Australia - AICS	Yes					
Canada - DSL	Yes					
Canada - NDSL	No (2,2,4-trimethyl-1,3-pentanediol monoisobutyrate; bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate; benzotriazol derivatives)					
China - IECSC	Yes					
Europe - EINEC / ELINCS / NLP	Yes					
Japan - ENCS	Yes					
Korea - KECI	Yes					
New Zealand - NZIoC	Yes					
Philippines - PICCS	Yes					
USA - TSCA	Yes					
Taiwan - TCSI	Yes					
Mexico - INSQ	Yes					
Vietnam - NCI	Yes					
Russia - ARIPS	Yes					
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)					

SECTION 16 OTHER INFORMATION

Revision Date	28/04/2020
Initial Date	02/10/2015

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

Powered by AuthorITe, from Chemwatch.



Safety Information



Summary of Key Hazards & Risk Assessment.

Risk assessment undertaken by:	Artforce Program Manager						
Activity:	Painting a Traffic Signal Box or Energex Padmount Transformer						
Equipment:	Refer Artforce Brisbane Manual: Painting Procedures						
Participant Advice:	Artforce Program Manager Artforce Brisbane is committed to providing and maintaining a safe and healthy work environment for all workers, contractors, volunteers, visitors and members of the public. Safety is everyone's responsibility. As a worker or volunteer you have a duty to:						
	 Follow all safe work practices, procedures, instructions and rules; Work in a manner which ensures the health and safety of yourself and others; 						
	 Encourage other workers/volunteers to work in a healthy and safe manner; 						
	 Participate in any relevant training; Report or rectify any unsafe conditions or incidents that come to your attention. 						
	There are a number of hazards involved in painting a Box. This Risk Assessment identifies possible Hazards and potential Risks associated with painting a Box. Control Measures / Actions have been identified to reduce the risk of harm or injury to yourself and/ or others. Please read the table on the following pages and note the Actions that are required of you to work safely while painting a Box. If you have any questions or concerns about the risks or actions required of you please contact us.						
	Thank you for taking safety seriously and helping us keep you and others safe.						
Person/s at Risk:	 Program Participant / volunteer Member of Public On-site Visitor 						
Other:	Equipment Damage Environment						

Secti	Section 1. Summary of key hazards that were identified during the assessment.						
1.	Moving vehicles	2.	Poor cabinet condition				
3.	Exposure to weather conditions	4.	Manual handling and manual work practices				
5.	Exposure to paints and cleaner	6.	Tripping – causing paint spill				
7.	Blocking pedestrian thoroughfare	8.	Exposure to environmental conditions (insects, pollens, etc)				
9.	Abuse, verbal and/or physical	10.	Parking in an undefined area				

Section 2. Risk Assessment (List identified hazards and detail measures taken to address the hazards)

Identified Hazard	Uncontrolled Risk		Risk Rating	Control Measures / Actions	Controlled Risk		Residu al Risk
	Likelihood	Consequences	Rating		Likelihood	Consequences	Rating
Moving vehicles on nearby roadway Risk of collision resulting in injury / fatality	Possible	Significant	7	 Box to be painted must be at least 1.5 metres from the edge of road in 40-60km/hr speed zones. Above 60km/hr speed zones the distance to road edge to be determined by the program manager on a 'case-by-case' basis. Consider time of day to paint i.e. not peak hour. Wear the high visibility safety vest provided. Maintain good awareness of the space that you and your equipment is taking up and work within your defined work space. If you feel in danger in any way, stop working and contact Artforce Brisbane asap. 	Rare	Significant	5
Poor cabinet condition Risk of electric shock / electrocution	Unlikely	Significant	6	 Routine Council condition reporting and maintenance. Check cabinet for rust holes, physical damage, open doors or any shocks or "tingles" when near or touching the cabinet. 	Rare	Significant	5

				•	If any of the above are present, stop work and contact Artforce Brisbane asap.			
Exposure to weather – sun and wind Risk of sunburn, windburn, heat stroke, fatigue, dehydration	Almost certain	Moderate	7	•	Wear a wide brim hat, long sleeve shirt and trousers, closed shoes, sunscreen and sunglasses. Drink plenty of water and have regular breaks - every hour. Consider your painting times i.e. perhaps early morning painting is best to avoid the heat of the day. Plan your painting around the movement of the sun (e.g. work on the western and northern side of the box in the morning, and work on the eastern and southern sides in the afternoon). Take rests or meal breaks in shady areas. Consider personal factors (eg general health, medications, etc) and work appropriately to your own constraints,	Rare	Moderate	3
Exposure to weather: Rain / Storm Risk of electrocution, slips, trips, falls	Possible	Significant	7	•	Do not work in wet weather or storms. Check weather forecast (eg BOM) when planning work. If a storm is imminent or it starts raining during your painting session stop work, pack up the equipment and find shelter.	Rare	Significant	5
Manual Handling: Lifting, Bending, Moving Equipment Risk of muscle strain, back injury, injured toes	Possible	Moderate	5	•	 Use mechanical assistance (eg hand trolley) as required. Two person lift where possible. Use good manual handling practices (see handout provided) including: Bend your knees (not your back) to lift equipment. Avoid twisting motions while lifting equipment. Remove heavier items from the Pack and carry separately to reduce the weight of the Pack if you find it too heavy. Wear closed shoes. 	Rare	Moderate	3
Ergonomics – manual work. Risk of muscle strain, over- exertion, fatigue	Possible	Moderate	5	•	Take regular breaks - every hour. Do not overextend or hold your body in awkward positions Use a low seat or stool so you can sit and paint lower areas of the box.	Rare	Moderate	3

Paint and Surface Cleaner exposure Risk of eye, skin and respiratory irritation	Possible	Minor	4	 Use a small, (3 step) step ladder on even ground to reach areas of the box that are above shoulder height. Use paint brushes and brush on paint to minimise risk of airborne paint and exposure to eyes and contact with skin. If you have particularly sensitive skin you may wish to wear gloves or a barrier cream. Use paints and cleaning product in accordance with instructions on Safety Data Sheets supplied and follow relevant first aid measures, including for skin and eye contact, inhalation and ingestion. 	Unlikely	Minor	3
Tripping – causing paint spill Risk of injury and harm to the environment	Almost certain	Minor	6	 Ensure paint pots are placed where they will not be a trip hazard. Ensure paint pots have lids on them when not directly in use and are on level ground. Use drop sheets to prevent ground and storm water contamination Use rags to clean up any paint spills as soon as practicable. Once the paint is dry these can be disposed of in a rubbish bin. 	Unlikely	Minor	3
Blocking pedestrian thoroughfare Risk of injury or fatality to pedestrians	Likely	Significant	8	 Set up work area as per the Site Set-Up Diagram ensuring you are not blocking the pedestrian thoroughfare. Do not have any more than two people painting the box at one time. If necessary work in alternating shifts. People not painting the box should stand well clear of the defined work space. 	Rare	Significant	5
Exposure to environment: spider, insect, or snake bites & grass or pollen Risk of allergic reactions	Likely	Moderate	6	 Inspect site for hazards by completing the Pre-Start Safety Checklist provided. Carry a first aid kit which includes bandages, insect repellent and an antidote for bites / stings and use as required. If you suffer from hay-fever / allergies address this potential risk as directed by your medical practitioner. 	Unlikely	Moderate	4

Negative interaction with members of the public Risk of verbal and/or physical abuse	Likely	Minor	5	 Call Emergency Services 000 if you require or feel you require immediate assistance. The majority of artists' experiences with the public are positive but please be aware that some members of the public may think you are doing something illegal or may simply not appreciate your efforts. Display the Work-in-Progress sign within the workspace. Have your Authority to Paint Notice to hand to show you are authorised to paint. If a member of the the public challenges the validity of these notices, advise them to contact Artforce Brisbane. If you feel in any danger, cease work immediately, pack up equipment (if safe to do so, otherwise leave in place), leave the site and contact Artforce Brisbane as soon as possible. Call Emergency Services 000 if you require or feel you may require immediate assistance. 	Unlikely	Minor	3
Parking vehicle near work site in an undefined parking area. Risks of injury to pedestrians, distress to property owners, damage to vehicle.	Likely	Moderate	6	• You must park your vehicle in accordance with road and parking regulations.	Rare	Insignificant	1

SIGN-OFF	Artforce Program Manager:	Bour	06/12/20	

1. CONSEQUE	1. CONSEQUENCE / IMPACT CRITERIA			Consequence / Impact Ratings (Where an event has more than one 'Loss Type', choose the 'Consequence / Impact' with the highest rating.						
	Description		If 'Near Miss' select potential rating).							
	2			Minor	Moderate	Major	Significant			
	Health and Safety		No treatment required	First aid treatment required	Medical treatment required	Lost time injury to worker, injury to member of the public or permanent injury or disability (public or workers)	One or more fatalities (public or workers)			
	Environmental		Limited or no environmental damage with no intervention required	Limited or minor damage requiring possible intervention	Environmental impact requiring treatment inside or outside site	Serious environmental harm requiring restoration and/or remediation inside or outside of site with possible regulatory intervention	Permanent/material damage to environment requiring ongoing remediation and monitoring with regulatory involvement and possible further enforcement action			
	Reputational		Slight impact- public awareness may exist but no public concern.	Limited impact- local public concern.	Considerable impact- regional public concern. Client unease.	National public concern. Leads to share price volatility. Loss of client.	International public attention. Direct impact on share price. Loss of core client.			
2. LIKELIHOO	D / PROBABILITY & RISK RATING									
Likelihood / Probability	Examples (Near-misses as well as actual events)	% chance of occurring			Risk Rating					
Almost Certain	The unwanted event has occurred frequently; occurs in order of one or more times per year & is likely to reoccur within 1 year	75% - 99%	5	6	7	8	9			
Likely	The unwanted event has occurred infrequently; occurs in order of less than once per year & is likely to reoccur within 5 years	50% - 74%	4	5	6	7	8			
Possible	The unwanted event has happened in the business/industry at some time; or could happen within 10 years	25% - 49%	3	4	5	6	7			
Unlikely	The unwanted event has happened in the business/industry at some time; or could happen within 20 years	11% - 24%	2	3	4	5	6			
Rare	The unwanted event has never been known to occur in the business/industry; or it is highly unlikely that it will occur within 20 years	0 - 10%	1	2	<mark>3</mark>	4	5			

Risk Level: <u>Extreme</u>: NO WORK TO BE CONDUCTED <u>High</u>: Requires Brisbane City Council sign-off <u>Medium</u>: Requires Artforce Manager sign-off <u>Low</u>: Monitor



This checklist is designed to help you, the registered Artforce Brisbane participant, work outside safely, reducing your exposure to health and safety risks and other hazards.

Please take a moment to complete this checklist each time you arrive at your box to start working and at any time when there is a significant change to the working conditions (e.g. weather event).

Date and time:							
Box ID and location:							
Participants:							
	APLE						
BEFC		YES	NO				
Is the main registered participant o	on site and supervising all others?						
Have all participants read and und the document folder in the Equipm	erstood these Information Sheets contained in ment Pack?						
• Safety Information – Risk Assess	sment						
• Paint and Cleaner Product and S	Paint and Cleaner Product and Safety Data Sheets						
Painting Procedures							
Emergency Procedures							
Site-Set Up Diagram							
Manual Handling Guide							
Covid 19 Direction							
Is the box you are painting at least	1.5 metres from the roadside kerb?						
Is the box you are painting in good condition (i.e. no rust holes, physical damage, open doors or any shocks or "tingles" when near or touching the cabinet)?							
Can you set up your work space wi							

BEFORE PAINTING	YES	NO
Are the weather conditions suitable for work to be conducted safely (e.g. too hot or storm approaching)?		
Are lighting conditions adequate for work to be conducted safely?		
Do you have your Authority to Paint Notice?		
Are you familiar with the Emergency procedures?		
Do you think it is safe to work around your BOX? This means that there are NO other hazards or potential safety risks at your work site that haven't already been addressed, for example: Is there broken glass around the box? Is there an ant's nest nearby?		
Are you familiar with the process for reporting hazards, incidents, near misses and injuries?		
Do you have a first aid kit on site?		
Do you understand the work procedures and do you have the necessary equipment to do the work safely?		
 Do you have all necessary personal protective equipment (PPE)? High visibility safety vest Sun safety gear: wide brimmed hat, long sleeve shirt and trousers, closed shoes, sunscreen, sunglasses. Skin protection (gloves or barrier cream) – optional Eye protection (glasses) – optional 		
If you answer "No" to any of the questions above, contact the A	Artforce Coord	linator

before you start work to help ensure your safety and others.

control measures you have used to work safely.			
HAZARD CONTROL			
Example: litter found at work site	Example: removed to public bin prior to commencing work		

AFTER PAINTING	YES	NO
Have you removed all masking from the box (including key hole and ID plates)?		
Are the key hole, ID plates, vents and light sensor free from paint?		
Have you left the worksite free from hazards and litter?		

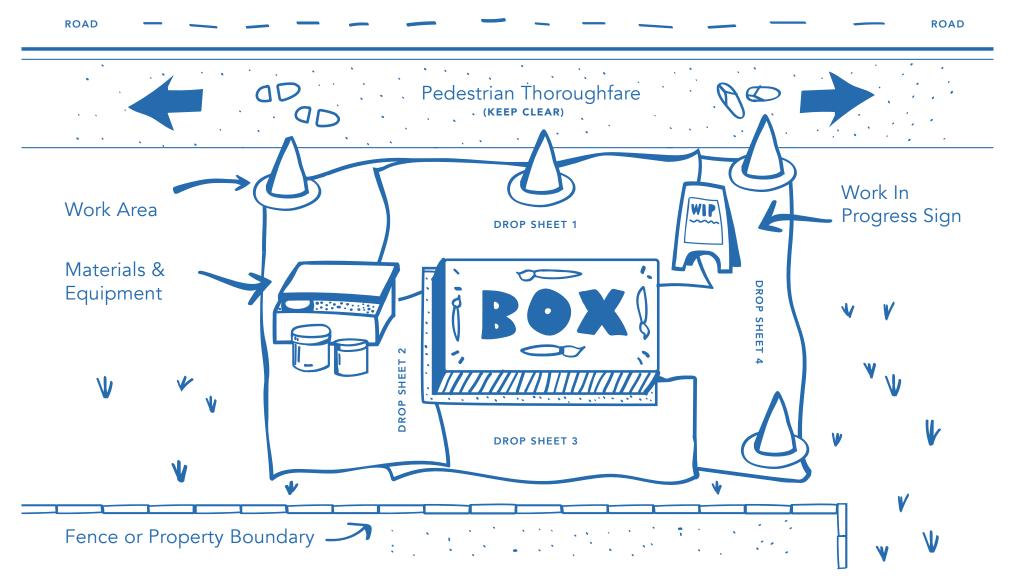
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Please leave this safety checklist in the Equipment Pack for return to Artforce Brisbane after painting is complete.



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Site Set-up Diagram



Manual Handling Guide



BEFORE you lift your object an unclear bath.

width apart for maximum support. Walk in small steps to maintain shoulder width

Ensure your leas are shoulder

placement.

AVOID lifting overhead or from below knee height

The risk of injury increases when objects are lifted from overhead or below knee height. Avoid storing objects at these heights when possible.

> Don't BEND or TWIST while you are lifting or carrying. Improper bending or twisting could throw you off balance or cause injury.

Corporate.Work.Health.



TIGHTEN your abs

Using your core abdominal muscles will hold you in the proper lifting position and reduce strain on your spine.

REDUCE the size of the load

smaller but more frequent

when possible

LIFT with your LEGS

Use lifting aids

Bend at the knees & hips not your back - Your leg muscles are stronger than your back and can withstand greater force. This is known as the Semi Squat Technique (Frog lift)



Two person lifts

HOLD the object at waist

LIFT WITH YOUR LEGS

KEEP YOUR BACK STRAIGHT KNOW YOUR LIMITS

level and close to the body

Your arms and your back are better equipped to lift a heavy object at waist level and close to your body than at any other height and/or far from your body.



lift an object, don't. Even if the object is not heavy. If it is awkwardly large or unstable. it can be difficult to lift. It is better to wait and ask for assistance than to try and lift something that could potentially cause injury.









Artforce Brisbane is committed to providing a safe and healthy work environment for all workers, contractors, program participants and members of the public.

In order to comply with government restrictions and help reduce the spread of Corona virus Artforce Brisbane participants are asked to practice good hygiene and social distancing.

Good hygiene

- covering your coughs and sneezes with your elbow or a tissue
- disposing of tissues properly
- washing your hands often with soap and water, including before and after eating and after going to the toilet
- using alcohol-based hand sanitisers
- cleaning and disinfecting surfaces and frequently used objects such as mobiles, keys and wallets



Social distancing

- staying at home when you are unwell
- avoiding large public gatherings
- keeping a distance of 1.5 metres between you and other people whenever possible
- minimising physical contact

Artforce Brisbane is:

- working remotely and practicing social distancing and good hygiene
- cleaning equipment packs and contents with an appropriate cleaning product

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6

To stay up to date with the most recent information on the Corona Virus pandemic please refer to the Queensland Health website:

https://www.covid19.qld.gov.au/

Incident Report Form

Incident details					
Name of person involved in the in	cident:	Date of incident:			
Location of incident:					
Incident investigation team:					
What task was being perform	ned at the time of the incide	nt?			
What happened? (e.g. 'emple	oyee tripped over box' or 'fo	rklift hit wall')			
What factors contributed to	the incident?				
Environment:	Equipment/ma	terials:	C		
	Layout / design	□ Wrong equipm	ent for the job	Equipment failure	
	Dust / fume	□ Inadequate maintenance		Material / equipment too heavy / awkward	
□ Vibration	□ Slip / trip hazard			□ Inadequate training provided	
Damaged / unstable floor	□ Other	L Other			
Work systems:		People:			
□ Hazard not identified	□ No / inadequate ri k as sessment conducted	Procedure not followed / no procedure exists		Drugs / alcohol	
No / inadequate safe work procedure	DNo ina∖'equate controls וריס,פוייס,	□ Fatigue		□ Time / production pressures	
□ Hazard not reported	L inadequate training / supervision	□ Change of routine		Distraction / personal issues / stress	
□ Other		Lack of communication		□ Other	
Corrective actions:					
Contributing factor (from above list)	What are we going to do to fix the problem?	Who	When	Completion date	
Issue fixed?		I	J	l	
Name	9	ianature		Date	

Signature Name Date Person involved in incident: Manager:

Incident investigation process guide

- **1.** Establish the facts of the incident, including:
 - What happened?
 - When and where did it happen?
 - What task was being done?
 - Who was involved?
 - Were there any witnesses?
- 2. Gather all necessary background information, for example:
 - maintenance records
 - safe work procedures
 - instructions manuals
 - training records.
- **3.** Consider all the potential contributing factors:
 - Environment: Did environmental conditions (e.g. light, noise, floor surfaces) contribute to the incident?
 - Equipment /materials: Did anything about the equipment, materials, tools etc (e.g. equipment failures, missing guards) contribute to the incident?
 - Work systems: Was there something about the system that contributed (e.g. hazard not identified, known hazard not addressed)?
 - People: Was there something the workers, supervisors or contractors did that contributed to the incident (e.g. poor communication, being tired or rushing to finish on time)?
- **4.** Determine the primary cause/s of the incident, that is, those which if they hadn't occurred then the incident wouldn't have occurred. Ask yourself *"Would the incident have happened if....?"*
- 5. Identify the root cause / system failures that underlie the primary cause/s and contributing factors.

One simple technique for identifying the root cause is the 'Five Whys'. This technique involves asking yourself 'Why did this happen?' and continuing to ask 'Why' for each response until you reach a conclusion that does not generate another 'why' and the underlying cause becomes apparent.

6. The final and most import step in any investigation is to take action to fix all the factors that contributed to the incident, starting with the primary cause/s and working through each of the contributing and underlying causes.

Template provided by the Queensland Government

Weather Check





Check the weather before painting!



Just what makes the ideal painting day? It's important to get it right or chances are you'll be less than satisfied with the results. 'Ideal' is a tough concept, though – like most things, you're best to aim for moderation.

Common outdoor weather conditions may not appear to be particularly harsh, but they put tremendous demands on exterior paint. The most damaging of these are: sunlight and ultraviolet (U.V.) radiation, water and moisture, and temperature changes.

Higher quality exterior paints help to combat the effects of each of these conditions.



Direct exposure to sunlight (U.V. radiation)

Direct sunshine can degrade the binder and pigment of paint, resulting in chalking, erosion and colour loss. While all paints suffer these effects to some degree, lower quality paints (and interior paints) will generally fail in these ways much earlier than quality exterior paints.

Waterborne paint binders usually resist the effects of direct sunlight better than the binders in solventborne paints, as the waterborne paint binders tend to be 'transparent' to U.V. radiation, while solventborne binders actually absorb the radiation, which breaks them down. Some paint colours, such as bright organic reds and yellows, are more vulnerable to fading caused by U.V. radiation. For these colours, a final coat of **Resene Clearcoat UVS** (see Data Sheet D502) with U.V. inhibitors can help the colours last longer.



Water and moisture

In combination with U.V. radiation, moisture tests the paint's resistance to chalking and fading. Generally higher quality waterborne paints perform better because of the characteristics of the binders they contain.

Changes in the moisture content of the substrate can also cause problems, especially with wood, hardboard and Plywood. When a wet substrate expands or a drying substrate contracts, it

can stress the paint, resulting in cracking and flaking. Permeable or 'breathable' waterborne paint allows the water to vaporise and escape. High quality waterborne paints with a high binder content are very flexible, offering added protection against problems with cracking and flaking.

Water and moisture can also cause blistering of exterior paints, and create an environment that is conducive to mould growth. Top quality paints typically contain special additives called fungicides that help prevent mould from forming. **Resene Quick Dry waterborne primer undercoat** (see Data Sheet D45), **Resene TimberLock** (see Data Sheet D48) and **Resene Wood Primer** (see Data Sheet D40) all contain substantial quantities of fungicide for extra protection. Consider asking for **Resene MoulDefender**, a mould inhibitor, to be added to paint being used in mould prone areas to inhibit mould growth. Fungicides inhibit mould growth but do not kill existing mould. Any mould present prior to painting should be treated with **Resene Moss & Mould Killer** (see Data Sheet D80).



Changing humidity

For water to evaporate from a waterborne paint there needs to be some spare room, usually expressed as relative humidity, in the surrounding air for it to go into. Relative humidity tells us how much water vapour there is in the air compared with how much it can actually hold. The ability of the air to hold water vapour lessens dramatically

as temperatures fall and the evaporation of water from a paint film may cease altogether with relatively small temperature changes of just 5°C.

At a relative humidity of about 100% water in a waterborne paint film can be likened to a car trying to get onto a busy motorway at peak hour traffic time. There is just so much traffic already there that there is no room for any more cars. At low temperatures water will have little extra energy to get up to the speed necessary to merge in with the traffic. This will lead to easy application – beautiful flow – but there is also a risk of water-sensitive materials accumulating on the surface.

If the temperature drops and the humidity increases, the paint stops losing water. If the temperature change was due the onset of sunset then there are likely to be serious problems with the paint. Any further decrease in temperature will result in dew formation and areas out of direct sunlight will feel the effects of this sooner rather than later. In the very worst case the paint will just not coalesce at all and be washed off by dew. At best the paint's film formation and ability to withstand mild weathering will be compromised. Blistering or surfactant leaching can occur.

Heavier coats of paint will take longer to dry and this will allow more time for temperatures to possibly fall and increase the probability of paint getting caught by high relative humidity.

Decorators should beware of calm, still autumn afternoons when skies are blue, as humidity related problems are more likely.

Low humidity means the air is thirsty for moisture and will grab it, fast, from anywhere – such as a paint film. Low humidity, high temperatures and a porous surface will lead to rapid loss of water and rapid drying. So fast, in fact, that the particles in the film won't have time to arrange themselves properly.



Temperature – Cold

All paints get thick (or more viscous) in the cold and are much harder to use, especially solventborne enamels. One answer is to add thinners, but this has the side-effect of reducing film build and therefore appearance. A better solution is to stand the paint in warm water, which makes it much easier to apply and helps get that smooth, brush

mark-free finish that you want.

At lower temperatures solventborne paints will continue to lose solvent but at temperatures about 3°C the chemical cross linking drying process will stop. The solventborne paint will remain soft and be vulnerable to physical damage. When temperatures return to normal the solventborne paint will continue its drying process. Heavily tinted solventborne paints may flatten off in gloss if caught by sudden rises in humidity during the drying process.

Above - Pages from the Resene 'Check the Weather Before Painting' flyer

Lower temperatures and high humidity will significantly slow down the dry time of waterborne paints. The plastic particles that make up the waterborne binder will harden in the cold to the extent that they can't fuse together to form a film. This can result in cracks forming and sometimes the whole paint film drying to a powder.

The **Resene wintergrade** range of topcoats and primers may be used in temperatures down to 2°C. Do not use when rain, snow or ice is expected, or in warm weather as the wet edge time will be too short to get a good finish.



Temperature – Hot

There will be times when paint is very difficult to apply due to heat, such as on a corrugated iron roof painted dark brown in the middle of a hot summer day. In these conditions, it is best to cease painting. Painting in very hot conditions will result in water evaporating out of the paint very quickly and as a result the paint will

thicken up and be very difficult to apply evenly. It will be difficult to keep a wet edge and brush or roller marks will not flow out. Paint brushes will tend to clog up and cans of paint can skin over quite rapidly.

The binder in waterborne paint consists of extremely small spherical particles of solid polymer. When the paint is applied and dries, these particles must fuse together to form a continuous, tough film and bind the pigment particles together. To occur properly, this fusion (or 'coalescence') takes a certain amount of time to occur and requires a certain degree of softness of the binder particles. If the paint is applied under conditions that force it to dry too quickly, it will be impossible for the paint to form a good, durable film even though the paint may look fine.

To help overcome this, **Resene Hot Weather Additive**, which can slow down the drying and give a longer wet edge, can be added to the paint. And if the surface is porous, it can be pre-wetted with water before the application of waterborne paints.

Applying solventborne paints on very hot days generally results in thick wet films that dry rapidly from the top. In these conditions wrinkling on recoat may be a problem.

If you are planning to paint a dark colour and your home is already too hot in summer, consider choosing a Resene CoolColour™. A Resene CoolColour is designed to reflect much more of the sun's energy than a standard colour reducing heat buildup.



Inside too

Checking the weather is also important for interior painting. When painting indoors the same rules regarding temperature and humidity still apply – that is, avoid painting in high humidity, low or high temperatures.

Ventilation is important when painting inside to ensure sufficient air circulation to help the paint cure correctly and to allow any solvents that may be released during the drying process to dissipate.



IF THE WASHING ON THE LINE ISN'T DRYING... NEITHER WILL THE PAINT!

So, what is ideal? 15-20°C, humidity 70-80% and a very gentle breeze.

In the absence of the ideal, the following is

a useful checklist:

- Is the washing on the line drying? If it's not, neither will your paint.
- If water spilt on a concrete path doesn't dry out, leave your painting until it does.
- If a thin coat of water applied to the substrate has not evaporated in 15 minutes, leave your painting until it does.
- A light breeze is ideal for drying your paint. If it's too windy, your paint will dry too fast, so move operations to a more sheltered side of the building.
- Don't paint in direct sunlight or in extremely hot weather. If you're pushed, paint the shady side of the building or wait until the temperature drops. A good idea is to start ahead of the sun and work your way around the building keeping ahead of the sun as you go.
- Cloudy or overcast conditions are ideal for painting... provided it's not raining and rain is not expected.
- As a general rule apply waterborne paints at temperatures above 10°C and solventborne and industrial paints when the temperature is at least 5°C above the dew point. The lower the temperature the longer the paint will take to dry.
- Read the label on your paint container. If you follow its recommendations, you'll reap the full benefit of the protective capabilities and finish of your paint.

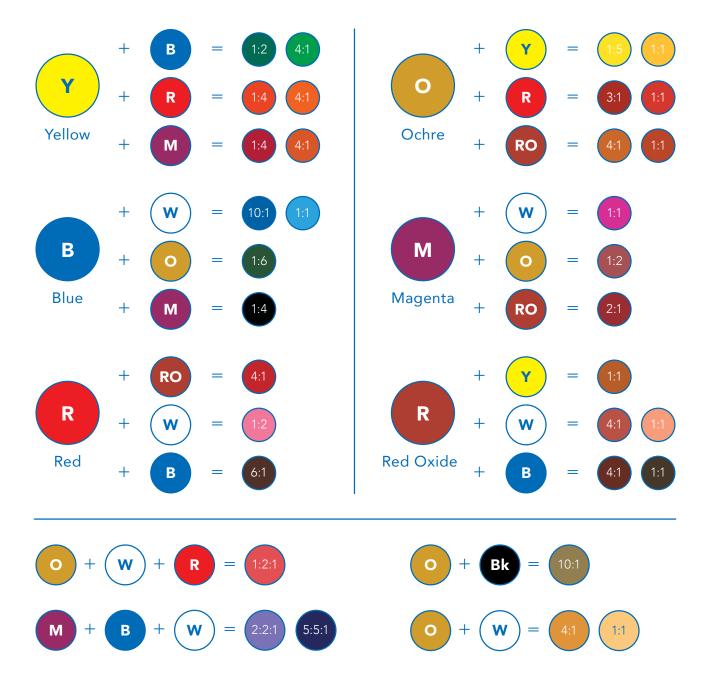


Above – Pages from the Resene 'Check the Weather Before Painting' flyer

Colour Mixing Guide

We recommend you mix colours at home in preparation for painting your artwork. Please note that the mixes below are a **guide only**. Use tiny amounts of paint to achieve your desired colours using the supplied mixing palette and then apply the same ratio to make up larger quantities for storing in the supplied mixing containers. When making (blending) colours, only mix the base colours together, limiting the number mixed. This will help to minimise the risk of colour change as different pigments fade at different rates – inorganic pigments such as oxides are more stable than bright organic pigments. The application of Clearcote UVS topcoats will protect the underlying coloured coat by aiding the colour retention of the more vulnerable organic pigments against fading.

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Light Sensor Information

Light sensors can be found in the recessed space either above the door or on the narrow side of the cabinet as indicated below.

The light sensors are quite small and vary in size from a pin head to a small button. Please ensure you **DO NOT** paint over them.



Examples of Light Sensors

Artwork: Dani Tikel, Honey I'm Home!, Corner Wynnum Rd and Burrai St, Morningside.

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Sticker Removal

When cleaning and prepping your Traffic Signal Box prior to painting, remove the Council applied 'NO POSTERS' stickers as well as any other non-official stickers.

To assist with this task your Equipment Box contains:

- Scraper
- Glue removal product (Orange Oil)
- Sandpaper x 2 grades

It is important to ensure removal of the orange oil prior to painting, as painting must occur on a clean, oil-free surface. Wash down with the supplied Resene Paint Prep and Housewash.

Ensure these items are included when returning the Equipment Box to the local Ward Office.







Photographing Your Artwork





Photographs of your artwork will be displayed on the gallery page of the Artforce Brisbane website. They are also posted on Brisbane City Council's Flickr page and distributed to the judges of the Annual Artforce Awards. They may also be used in the Artforce Brisbane e-newsletter and social media posts. It's important to take good quality, high-resolution photographs to showcase your work.

Photos of the completed artwork Mandatory minimum requirement

- A. One photograph of each side of the box taken 'straight on'. Total of up to 4 photographs.
- B. Two angled photographs: one showing the front and side of the box; and one showing the rear and other side of the box.
- C. Two photographs of close-up 'details' of the artwork ie a selected area.
- Please ensure there are no people and no extra things in the photograph to detract from your artwork, such as safety cones, equipment pack, paint pots, water bottles, etc and that all masking tape has been removed. Photographs with equipment or tape will not be accepted.

Photos of the work in progress Optional extras

You are welcome to submit:

- Work-in-progress photos, including photos of yourself at work.
- Work-in-progress time-lapse video
- Context photos, including photos with members of the public, friends, family, or neighbourhood dogs [Refer Image Release Form].

Lighting

- Please ensure that the artwork is in good light for photographing.
- Avoid photographing when there are shadows on your artwork. If shade is a problem, wait until the sun is gone and use a flash. If using a flash please avoid the "flash reflection" by taking the photo a little to one side.

File format requirements

- Digital photographs jpg files are preferred. The minimum size is 1500 x 2000 pixels, approximately 2MB each (minimum).
- Photos in a standard 3 x 4 ratio. Please check the ratio settings on your camera or phone.
- Un-cropped images. Please do not crop photos, photos will be cropped by Artforce Brisbane to suit the display dimensions of the website.
- Please note: sending images from your phone may often compress the image quality. Please ensure to send the highest quality images through your phone.

How to submit your photographs

- Images can be sent to Artforce Brisbane by filetransfer, using programs such as Dropbox, WeTransfer, Hightail, or something similar. To assist, Artforce can provide a link to a Dropbox folder on request.
- Images can be sent via email. Emails should be kept to less than 20MB each. It is fine to send multiple emails.
- Images can be placed on a USB data-stick and posted.

There is no limit to the number of photos that you can submit.

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Example images: all sides 'straight on'

Tracey Pearce-Sampson and the Rotary Club of Carindale Locals Helping Locals. 21 years of Rotary in Carindale. June 2021 Creek Rd & Meadowlands Rd, Carina







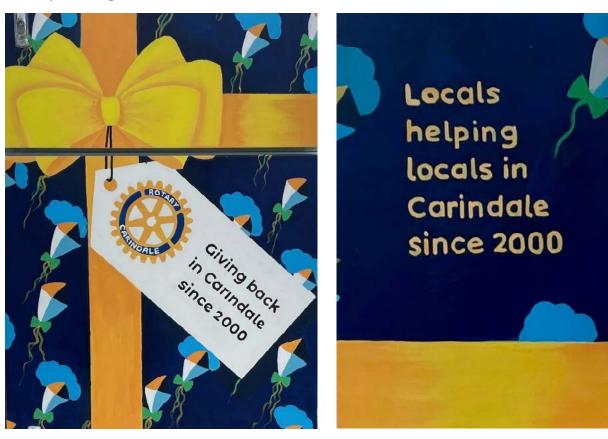


Example images: angles - front & side; back & other side





Example images: details



RISBANE

Example images: context and work-in-progress



Still and Moving Image Release Form





Artforce Brisbane participants are encouraged to submit still and/or moving images of work-in-progress and completed artwork with social context, such as images of family and friends painting or posing with the box. Artforce Brisbane wishes to use these images for promotional purposes. Any images which feature identifiable people require the written permission of those people prior to our use.

Please ask any subjects featured in your images to sign this Image Release Form and submit the completed form together with your images to Artforce Brisbane.

TSB or EPT BOX NUMBER AND LOCATION (SUBURB):

PRIMARY ARTFORCE BRISBANE PARTICIPANT:	ETE
ARTWORK TITLE:	DMPLE.
DATE PAINTED (MONTH & YEAR):	<i>J</i>
0 <u></u>	

SUBJECT/S GIVING CONSENT:

Subject Name	Name of Parent or Guardian if applicable	Address	Please indicate if you identify as Aboriginal and∕ or Torres Strait Islander? (√)

I, the above named subject OR parent or guardian of the above named subject, give my unreserved permission for all still and moving images taken or recorded by or on behalf of or made available to Artforce Brisbane of me ("the Images") to be:

- used in the promotional and advertising material of Artforce Brisbane; and/or
- provided to any third party, including but not limited to media organisations, government bodies, not-for- profit organisations and Artforce Brisbane partners, for their use as they see fit.

The Images may be used in various media formats including online media, social media, print, newspaper, video, public displays, television, and electronic means of communication, and in any edited form.

I waive any rights and claims, present and future, to any fees or royalties or other benefits whatsoever for or in connection with the use of the Images.

If I wish to withdraw permission for Images to be used, I must so inform Artforce Brisbane in writing. I understand that if I so withdraw permission for the Images to be used, Artforce Brisbane will cease any future new publication or use of the Images, but for several years the Images may appear in printed and electronic material which has already been produced or disseminated.

(For Aboriginal and Torres Strait Islander people) I also understand that images of Aboriginal and Torres Strait Islanders may appear in printed and electronic material for several years. If I am an Aboriginal or Torres Strait Islander, Artforce Brisbane will take reasonable steps to prevent the Images from appearing on material published after my death. However, I understand and agree that, despite those efforts, the Images may still be published or disseminated.

I understand that Artforce Brisbane will make all reasonable efforts to ensure that any use of the Images by Artforce Brisbane or third parties complies will:

- respect and protect those whose images are recorded in Artforce Pisberie photography;
- manage and use images owned by Artforce Brisbane appropriately

I understand that I have no actionable right against Artforce Brisbane for any failure by either Artforce Brisbane or by any third party to comply with the terms of this release form.

PRINT NAME	SIGNATURE	DATE
PRINT NAME	SIGNATURE	DATE
Artforce Brisbane	- 69 -	An initiative of Brisbane City Council





Insurances – Public Liability & Personal Accident

Certificate of Currency



This certificate confirms that the undermentioned policy is current as at the date shown below.

PRODUCT NAME	Group Personal Accident and Sickness
POLICY NUMBER	2000149960
ISSUED	06 December 2021
INSURED	Elizabeth Jackson
NAMED ADDRESS	15 York street, Morningside, QLD, 4170
BROKERAGE	Bluebook Insurance Brokers Pty Ltd
BROKERAGE ADDRESS	Level 10, 333 Ann St, Brisbane, QLD 4000, Australia
POLICY PERIOD	From: 09 December 2021 at 4pm local standard time
	To: 09 December 2022 at 4pm local standard time
	(both dates inclusive)
POLICY WORDING	Liberty AU Group Personal Accident and Sickness PDS and Policy Wording - Nov 2021
OPERATIVE TIME	As per Schedule of Benefits
DOES AN AGGREGATE DEDUCTIBLE APPLY TO	No

THIS RISK?

	ate of Ci	urrency		p.2 of 3
		arrency		piloro
CHEDULE (OF BENEFIT:	5		
CATEGORY 1				
NSURED P	NSURED PERSONS All voluntary worker		rs of the insured only	
OPERATIVI	E TIME	Voluntary workers		
SECTION				BENEFIT PAYABLE / SUM INSURED
PART A	DEATH A	ND CAPITAL		\$100,000
	BENEFITS	5		
PART B	FRACTU	RED BONES		\$2,500
PART C		INCOME –	100% of salary up to	\$1,000
	WEEKLY	INJURY BENEFIT	Benefit Period	104 weeks
			Excess Period	7 days
PART D		INCOME –		Not Insured
	WEEKLY SICKNESS BENEFIT			
PART E		SURGICAL	As per Policy	
		SOVERSEAS		
PART F		S – SURGICAL S OVERSEAS	Not Insured	
PART G	DENTAL		As per Policy	
			· · · · · · · · · · · · · · · · · · ·	
PART H	NON MEI	L'EXPENSES	90% of expenses up to	\$2,500
	IVIEDICAI	LEVLENDED		



AU | Accident & Health | Certificate of Currency | May 2019

Certificate of Currency			p.3 of 3
Policy Aggregate Limits of Liability		* 4 000 000	
Personal Accident	Any One Occurrence	\$1,000,000 \$500,000	

This Certificate:

- Is issued as a matter of information only and confers no rights upon the holder
 Does not amend, extend or alter the coverage afforded by the policy listed
 Is only a summary of the cover provided
 Reference must be made to the current policy wording for full details
 Is current at the date of issue only
 Please contact Fullerton Health Corporate Services on +61 2 9299 5390 for assistance with all claims



AU | Accident & Health | Certificate of Currency | May 2019

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Authority to Paint Notice

This will be supplied when we provide you with your pack/s.

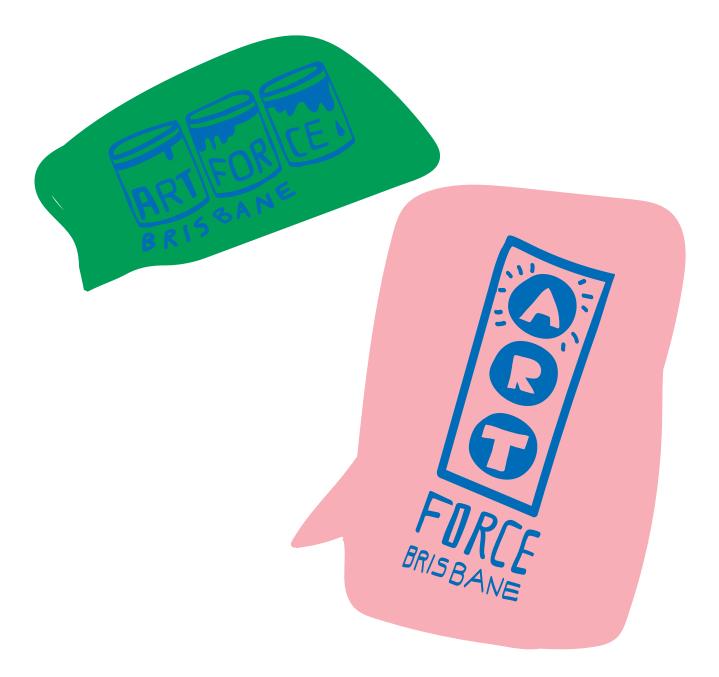


Feedback Survey

We value your contribution to the Artforce Brisbane program and are keen to receive your feedback. To complete the survey online please go to: https://www.surveylegend.com/s/2vem

OR

Complete the hard copy form provided in the equipment pack and then either return in your equipment pack or scan and email to **info@artforcebrisbane.com.au**



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An initiative of



Dedicated to a better Brisbane