

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

CHEMICAL CAPSULES #622-1815, 622-1821, 622-1837, 622-1843

### SYNONYMS

"Manufacturer's Codes: 622-1815, 622-1821, 622-1837, 622-1843"

### PROPER SHIPPING NAME

RESIN SOLUTION, flammable

### PRODUCT USE

Provides an expansion free anchorage in concrete.

### SUPPLIER

Company: RS Components Pty Ltd  
Address:  
Units 30 & 31, 761 Great South Road  
Penrose  
Auckland, 1006  
New Zealand  
Telephone: +64 9 526 1600  
Fax: +64 9 579 1700  
Website: www.rsnewzealand.com

Company: RS Components Pty Ltd  
Address:  
25 Pavesi Street  
Smithfield  
NSW, 2164  
Australia  
Telephone: +1 300 656 636  
Emergency Tel: 1800 039 008 (24 hours)  
Emergency Tel: +61 3 9573 3112  
Fax: +1 300 656 696

## Section 2 - HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

**HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.**



### RISK

Risk Codes

R10  
R20  
R36/38  
R40(3)  
R43

Risk Phrases

- Flammable.
- Harmful by inhalation.
- Irritating to eyes and skin.
- Limited evidence of a carcinogenic effect.
- May cause SENSITISATION by skin contact.

### SAFETY

Safety Codes

S23  
S24  
S25  
S36  
S37  
S39  
S51  
S09  
S401

Safety Phrases

- Do not breathe gas/fumes/vapour/spray.
- Avoid contact with skin.
- Avoid contact with eyes.
- Wear suitable protective clothing.
- Wear suitable gloves.
- Wear eye/face protection.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- To clean the floor and all objects contaminated by this material, use water and detergent.
- Keep container tightly closed.
- Keep away from food, drink and animal feeding stuffs.
- In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
- If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- This material and its container must be disposed of as hazardous waste.

S07  
S13  
S26  
S46  
S60

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### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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| NAME                                   | CAS RN     | %        |
|----------------------------------------|------------|----------|
| styrene                                | 100-42-5   | 1-<12.5  |
| dibenzoyl peroxide                     | 94-36-0    | 1-<2     |
| 1, 1' - (p- tolylimino)dipropan- 2- ol |            | 0.1-<1   |
| silica crystalline - quartz            | 14808-60-7 | Not Spec |
| dicyclohexyl phthalate                 | 84-61-7    | Not Spec |

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### Section 4 - FIRST AID MEASURES

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#### SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

#### EYE

- 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 seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

- 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.

#### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

#### NOTES TO PHYSICIAN

Treat symptomatically.

For acute or short term repeated exposures to styrene:

##### INHALATION:

- Severe exposures should have cardiac monitoring to detect arrhythmia.
- Catecholamines, especially epinephrine (adrenaline) should be used cautiously (if at all).
- Aminophylline and inhaled beta-two selective bronchodilators (e.g. salbutamol) are the drugs of choice for treatment of bronchospasm.

##### INGESTION:

- Ipecac syrup should be given for ingestions exceeding 3ml (styrene)/kg.

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### Section 5 - FIRE FIGHTING MEASURES

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#### EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

#### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

**FIRE/EXPLOSION HAZARD**

- Liquid and vapour are flammable.
  - Moderate fire hazard when exposed to heat or flame.
  - Vapour forms an explosive mixture with air.
  - Moderate explosion hazard when exposed to heat or flame.
- Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), other pyrolysis products typical of burning organic material.

**FIRE INCOMPATIBILITY**

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

**HAZCHEM**

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**Section 6 - ACCIDENTAL RELEASE MEASURES**

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**MINOR SPILLS**

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

**MAJOR SPILLS**

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.

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

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**Section 7 - HANDLING AND STORAGE**

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**PROCEDURE FOR HANDLING**

- Containers, even those that have been emptied, may contain explosive vapours.
  - Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
  - DO NOT allow clothing wet with material to stay in contact with skin.
- The substance is a peroxidisable vinyl monomer that may exothermically polymerise as a result of decomposition of accumulated peroxides; that is, the peroxides initiate very energetic polymerisation of the bulk monomer
- Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised.
- A responsible person should maintain an inventory of peroxidisable chemicals or annotate the general chemical inventory to indicate which chemicals are subject to peroxidation. An expiration date should be determined. The chemical should either be treated to remove peroxides or disposed of before this date.
  - The person or laboratory receiving the chemical should record a receipt date on the bottle. The individual opening the container should add an opening date.
  - Unopened containers received from the supplier should be safe to store for 18 months.
  - Opened containers of inhibited material should not be stored for more than 12 months; they should NOT be stored under an inert atmosphere. Generally, storage of inhibited vinyl monomers should be under air rather than nitrogen or other inert atmosphere, because customary inhibitors are phenolic compounds, which require oxygen for their action. Most vinyl monomers may be polymerized without removal of inhibitor by proper adjustment of initiator concentration, thus making the isolation of the more hazardous uninhibited material unnecessary.
  - Avoid all personal contact, including inhalation.
  - Wear protective clothing when risk of overexposure occurs.
  - Use in a well-ventilated area.
  - Prevent concentration in hollows and sumps.

**SUITABLE CONTAINER**

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
- Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.

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## Chemwatch Independent Material Safety Data Sheet

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## Section 7 - HANDLING AND STORAGE

**STORAGE INCOMPATIBILITY**

- Avoid reaction with oxidising agents.
- Avoid strong acids, bases.
- Segregate from alcohol, water.

**STORAGE REQUIREMENTS**

- Store in original containers in approved flammable liquid storage area.
  - Store away from incompatible materials in a cool, dry, well-ventilated area.
  - DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
  - No smoking, naked lights, heat or ignition sources.
- Easily peroxidisable.
- Products formed as a result of peroxidation are not only safety hazards but may chemically alter the chemical behavior of the parent compound.
  - Should have a warning label affixed bearing the date of receipt in the laboratory and the date on which the container label is first opened, or laboratory synthesised materials are the responsibility of the individual chemist.
  - WARNING: This product may form peroxides which themselves are not themselves particularly hazardous but which on decomposition may initiate explosive polymerisation of the bulk monomer (Trommsdorf effect).
  - Should be evaluated every 12 months, redated if safe or else discarded.

**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****EXPOSURE CONTROLS**

| Source                       | Material                                                                       | TWA ppm | STEL ppm | STEL mg/m <sup>3</sup> | Notes                                                                                              |
|------------------------------|--------------------------------------------------------------------------------|---------|----------|------------------------|----------------------------------------------------------------------------------------------------|
| Australia Exposure Standards | Chemical Capsules #622-1815, 622- 1821, 622-1837, 622- 1843 (Styrene, monomer) | 50      | 100      | 426                    | American Conference of Governmental Industrial Hygienists (ACGIH)4, 5 is the documentati on source |

The following materials had no OELs on our records

- dicyclohexyl phthalate:

CAS:84- 61- 7

**MATERIAL DATA**

CHEMICAL CAPSULES #622-1815, 622-1821, 622-1837, 622-1843:

**DIBENZOYL PEROXIDE:**

For benzoyl peroxide:

The recommendation for the TLV-TWA is based on the absence of subjective symptoms of irritation of the nose and throat in humans exposed to 5.25 mg/m<sup>3</sup>. Whether this is sufficiently low to prevent cumulative effects in man is not known.

CHEMICAL CAPSULES #622-1815, 622-1821, 622-1837, 622-1843:

**STYRENE:**

for styrene:

Odour Threshold: 0.017 to 1.9 with a geometric average threshold of 0.32 ppm.

NOTE: Detector tubes measuring styrene at greater than 10 ppm are available.&lt;/&gt;.

**STYRENE:**

Exposed individuals are reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

Odour Safety Factor (OSF) is determined to fall into either Class A or B.

The Odour Safety Factor (OSF) is defined as:

OSF= Exposure Standard (TWA) ppm/ Odour Threshold Value (OTV) ppm

Classification into classes follows:

| Class | OSF     | Description                                                                                                                                                       |
|-------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A     | 550     | Over 90% of exposed individuals are aware by smell that the Exposure Standard (TLV- TWA for example) is being reached, even when distracted by working activities |
| B     | 26- 550 | As " A" for 50- 90% of persons being distracted                                                                                                                   |

continued...

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

|   |         |                                                                                                        |
|---|---------|--------------------------------------------------------------------------------------------------------|
| C | 1- 26   | As " A" for less than 50% of persons being distracted                                                  |
| D | 0.18- 1 | 10- 50% of persons aware of being tested perceive by smell that the Exposure Standard is being reached |
| E | <0.18   | As " D" for less than 10% of persons aware of being tested                                             |

**SILICA CRYSTALLINE - QUARTZ:**

The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 µm (+-) 0.3 µm and with a geometric standard deviation of 1.5 µm (+-) 0.1 µm, i.e..generally less than 5 µm.

Because the margin of safety of the quartz TLV is not known with certainty and given the associated link between silicosis and lung cancer it is recommended that quartz concentrations be maintained as far below the TLV as prudent practices will allow.

Exposure to respirable crystalline silicas (RCS) represents a significant hazard to workers, particularly those employed in the construction industry where respirable dusts of cement and concrete are common.

WARNING: For inhalation exposure ONLY:

This substance has been classified by the ACGIH as A2 Suspected Human Carcinogen.

**DICYCLOHEXYL PHTHALATE:**

It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience).

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

OES TWA: 5 mg/m3

**PERSONAL PROTECTION****RESPIRATOR**

•Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

**EYE**

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

**HANDS/FEET**

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.

**NOTE:**

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

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. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

**OTHER**

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.
- Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
- For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets), non sparking safety footwear.

**ENGINEERING CONTROLS**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE**

Capsule containing flammable liquid; insoluble in water.

**PHYSICAL PROPERTIES**

Liquid.

Does not mix with water.

Sinks in water.

|                           |                |                                 |                |
|---------------------------|----------------|---------------------------------|----------------|
| State                     | Liquid         | Molecular Weight                | Not Applicable |
| Melting Range (°C)        | Not Applicable | Viscosity                       | Not Available  |
| Boiling Range (°C)        | 145 approx.    | Solubility in water (g/L)       | Immiscible     |
| Flash Point (°C)          | 34 (Resin)     | pH (1% solution)                | Not Applicable |
| Decomposition Temp (°C)   | Not Available  | pH (as supplied)                | Not Applicable |
| Autoignition Temp (°C)    | 490            | Vapour Pressure (kPa)           | Not Available  |
| Upper Explosive Limit (%) | 8.0            | Specific Gravity (water=1)      | 1.15           |
| Lower Explosive Limit (%) | 1.1            | Relative Vapour Density (air=1) | Not Available  |
| Volatile Component (%vol) | Not Available  | Evaporation Rate                | Not Applicable |

**Section 10 - STABILITY AND REACTIVITY****CONDITIONS CONTRIBUTING TO INSTABILITY**

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

**Section 11 - TOXICOLOGICAL INFORMATION****POTENTIAL HEALTH EFFECTS****ACUTE HEALTH EFFECTS****SWALLOWED**

Accidental ingestion of the material may be damaging to the health of the individual.

Styrene is absorbed into the body following oral or inhalation exposure. Its metabolites include styrene oxide, styrene glycol, mandelic acid, benzoic acid, hippuric acid, phenyl glyoxylic acid and possibly vinyl phenol. It is detectable in liver, kidney, pancreas, expired air, urine and faeces in the body.

Considered an unlikely route of entry in commercial/industrial environments.

**EYE**

This material can cause eye irritation and damage in some persons.

**SKIN**

This material can cause inflammation of the skin on contact in some persons.

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 or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Styrene has been showed to be absorbed less through the skin than via the airways.

**INHALED**

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

Central nervous system (CNS) depression is seen at styrene exposures exceeding 50 ppm, whilst headache, fatigue, nausea and dizziness are seen consistently at exposures of 100 ppm. Evidence exists that at 100 ppm, 5-10% reductions in sensory nerve conduction occur, and after exposure to 50 ppm, there is slowing of reaction times. Exposure at 370 ppm produces unpleasant subjective symptoms and signs of neurological impairment. High vapour concentrations may have a toxic and anaesthetic effect, which may lead to unconsciousness or death. Exposure at 0.1% can lead rapidly to unconsciousness whilst exposure to 1% can cause death in less than one hour. Simple reaction times were increased and co-ordination decreased amongst volunteers inhaling 350 ppm (via mouth tube) for 30 minutes. Controlled inhalation studies with 300 ppm (via mouth tube) for one hour found reduced eye tracking abilities but no changes in balance or co-ordination.

### CHRONIC HEALTH EFFECTS

There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

Exposure to styrene may aggravate central nervous system disorders, chronic respiratory disease, skin disease, kidney disease and liver disease. Exposure to styrene at work causes effects on the nervous system. It causes a reversible loss in the ability to tell apart colours, and effects on hearing have been reported. Animal testing has revealed toxicity to the lung and nose. It is unclear whether styrene can cause miscarriage. Styrene can cause chromosomal damage, but there is little evidence that it causes congenital deformities in humans.

### TOXICITY AND IRRITATION

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. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.

### CARCINOGEN

|                             |                                                                                             |       |    |                                                      |
|-----------------------------|---------------------------------------------------------------------------------------------|-------|----|------------------------------------------------------|
| styrene                     | International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs | Group | 2B | Possibly carcinogenic to humans                      |
| dibenzoyl peroxide          | International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs | Group | 3  | Not classifiable as to its carcinogenicity to humans |
| silica crystalline - quartz | International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs | Group | 1  | Carcinogenic to humans                               |

### SKIN

|         |                                                    |                               |   |
|---------|----------------------------------------------------|-------------------------------|---|
| styrene | GESAMP/EHS Composite List - GESAMP Hazard Profiles | D1: skin irritation/corrosion | 2 |
|---------|----------------------------------------------------|-------------------------------|---|

## Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

### Ecotoxicity

| Ingredient                  | Persistence: Water/Soil | Persistence: Air  | Bioaccumulation   | Mobility          |
|-----------------------------|-------------------------|-------------------|-------------------|-------------------|
| styrene                     | LOW                     | LOW               | LOW               | MED               |
| dibenzoyl peroxide          | LOW                     | HIGH              | LOW               | MED               |
| silica crystalline - quartz | No Data Available       | No Data Available | No Data Available | No Data Available |
| dicyclohexyl phthalate      | HIGH                    | No Data Available | LOW               | LOW               |

## Section 13 - DISPOSAL CONSIDERATIONS

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
  - Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

## Section 14 - TRANSPORTATION INFORMATION



Labels Required: FLAMMABLE LIQUID

### HAZCHEM:

•3Y (ADG7)

### ADG7:

|                                                 |                 |                                                       |      |
|-------------------------------------------------|-----------------|-------------------------------------------------------|------|
| Class or Division:                              | 3               | Subsidiary Risk:                                      | None |
| UN No.:                                         | 1866            | Packing Group:                                        | III  |
| Special Provision:                              | 223 *           | Limited Quantity:                                     | 5 L  |
| Portable Tanks & Bulk Containers - Instruction: | T2              | Portable Tanks & Bulk Containers - Special Provision: | TP1  |
| Packagings & IBCs - Packing Instruction:        | P001 IBC03 LP01 | Packagings & IBCs - Special Packing Provision:        | PP1  |

Name and Description: RESIN SOLUTION, flammable

### Air Transport IATA:

|                     |      |                    |      |
|---------------------|------|--------------------|------|
| ICAO/IATA Class:    | 3    | ICAO/IATA Subrisk: | None |
| UN/ID Number:       | 1866 | Packing Group:     | III  |
| Special provisions: | A3   |                    |      |

Shipping name: RESIN SOLUTION, flammable

### Maritime Transport IMDG:

|                     |            |                     |         |
|---------------------|------------|---------------------|---------|
| IMDG Class:         | 3          | IMDG Subrisk:       | None    |
| UN Number:          | 1866       | Packing Group:      | III     |
| EMS Number:         | F- E, S- E | Special provisions: | 223 955 |
| Limited Quantities: | 5 L        |                     |         |

Shipping name: RESIN SOLUTION, flammable

## Section 15 - REGULATORY INFORMATION

### Indications of Danger:

Xn Harmful

POISONS SCHEDULE S5

continued...



**REGULATIONS****Regulations for ingredients****styrene (CAS: 100-42-5) is found on the following regulatory lists;**

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "Australia Dangerous Goods Code (ADG Code) - Goods Too Dangerous To Be Transported", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "Australia Exposure Standards", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "FisherTransport Information", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft", "International Chemical Secretariat (ChemSec) SIN List (\*Substitute It Now!)", "International Fragrance Association (IFRA) Survey: Transparency List", "IOFI Global Reference List of Chemically Defined Substances", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR List of Chemicals for Priority Action", "Sigma-AldrichTransport Information", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water"

**dibenzoyl peroxide (CAS: 94-36-0) is found on the following regulatory lists;**

"Acros Transport Information", "Australia - South Australia Controlled Substances (Poisons) Regulations - Schedule E: Schedule 2 poisons authorised to be sold by holder of a medicine sellers licence", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Australian Pesticides and Veterinary Medicines Authority (APVM) Record of approved active constituents", "Australia Dangerous Goods Code (ADG Code) - Goods Too Dangerous To Be Transported", "Australia Dangerous Goods Code (ADG Code) - List of Currently Assigned Organic Peroxides in Packagings", "Australia Exposure Standards", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft", "International Numbering System for Food Additives", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments"

**silica crystalline - quartz (CAS: 14808-60-7, 122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 70594-95-5, 87347-84-0) is found on the following regulatory lists;**

"Australia - New South Wales - Work Health and Safety Regulation 2011 - Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring", "Australia - New South Wales - Work Health and Safety Regulation 2011 Restricted hazardous chemicals", "Australia - New South Wales Hazardous Substances Prohibited for Specific Uses", "Australia - New South Wales Hazardous Substances Requiring Health Surveillance", "Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring", "Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Restricted hazardous chemicals", "Australia - Queensland Work Health and Safety Regulation - Hazardous chemicals (other than lead) requiring health monitoring", "Australia - Queensland Work Health and Safety Regulation - Restricted hazardous chemicals", "Australia - South Australia - Hazardous Substances Requiring Health Surveillance", "Australia - South Australia - Work Health and Safety Regulations 2012 - Requirements for health monitoring - Hazardous chemicals (other than lead) requiring health monitoring", "Australia - South Australia - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals", "Australia - Tasmania - Work Health and Safety Regulations 2012 - Requirements for Health Monitoring - Hazardous chemicals (other than lead) requiring health monitoring", "Australia - Tasmania - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals", "Australia - Tasmania Hazardous Substances Prohibited for Specified Uses", "Australia - Tasmania Hazardous Substances Requiring Health Surveillance", "Australia - Western Australia Hazardous Substances Prohibited for Specified Uses or Methods of Handling", "Australia - Western Australia Hazardous Substances Requiring Health Surveillance", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia Hazardous Substances Requiring Health Surveillance", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance", "Australia Work Health and Safety Regulations 2011 - Hazardous chemicals (other than lead) requiring health monitoring", "Australia Work Health and Safety Regulations 2011 - Restricted hazardous chemicals", "FisherTransport Information", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments"

**dicyclohexyl phthalate (CAS: 84-61-7) is found on the following regulatory lists;**

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (AQUA/1 to 6 - non-pesticide anthropogenic organics)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Aquatic habitat)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "International Chemical Secretariat (ChemSec) SIN List (\*Substitute It Now!)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR List of Chemicals for Priority Action", "Sigma-AldrichTransport Information"

**No data for Chemical Capsules #622-1815, 622-1821, 622-1837, 622-1843 (CW: 37-0177)**

**Section 16 - OTHER INFORMATION****Denmark Advisory list for selfclassification of dangerous substances**

| Substance              | CAS       | Suggested codes |
|------------------------|-----------|-----------------|
| dicyclohexyl phthalate | 84- 61- 7 | Xi; R38 N;      |

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R50/53**INGREDIENTS WITH MULTIPLE CAS NUMBERS**

| Ingredient Name      | CAS                                                                    |
|----------------------|------------------------------------------------------------------------|
| silica crystalline - | 14808- 60- 7, 122304- 48- 7, 122304- 49- 8, 12425- 26- 2, 1317- 79- 9, |
| quartz               | 70594- 95- 5, 87347- 84- 0                                             |

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.

A list of reference resources used to assist the committee may be found at:

[www.chemwatch.net/references](http://www.chemwatch.net/references).

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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*This is the end of the MSDS.*