

---

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

---

### 1.1 Product identifier

**Product name** CHEMSET 101 PLUS

**Synonyms** C101C, C101J, ISKP - PRODUCT CODE(S) • CHEMSET 101 • POLYESTER RESIN KIT

### 1.2 Uses and uses advised against

**Uses** ADHESIVE • ANCHORING COMPOUND • ANCHORING SYSTEM • POLYESTER RESIN KIT

### 1.3 Details of the supplier of the product

**Supplier name** RAMSETREID AU (A DIVISION OF ITW AUSTRALIA PTY LTD)

**Address** 1 Ramset Drive, Chirnside Park, VIC, 3116, AUSTRALIA

**Telephone** 1300 780 063

**Fax** 1300 780 122

**Email** [enquiry@ramset.com.au](mailto:enquiry@ramset.com.au)

**Website** [www.ramset.com.au](http://www.ramset.com.au)

### 1.4 Emergency telephone numbers

**Emergency** 1800 033 111

---

## 2. HAZARDS IDENTIFICATION

---

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### Physical Hazards

Flammable Liquids: Category 3

#### Health Hazards

Skin Sensitisation: Category 1

Serious Eye Damage / Eye Irritation: Category 2A

Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)

#### Environmental Hazards

Aquatic Toxicity (Acute): Category 1

Aquatic Toxicity (Chronic): Category 1

### 2.2 GHS Label elements

**Signal word** WARNING

#### Pictograms



#### Hazard statements

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

## PRODUCT NAME CHEMSET 101 PLUS

### Prevention statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P243	Take action to prevent static discharges.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

### Response statements

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P321	Specific treatment is advised - see first aid instructions.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.

### Storage statements

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

### Disposal statements

P501	Dispose of contents/container in accordance with relevant regulations.
------	--

### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
ADDITIVE(S)	-	-	Remainder
VINYLTOLUENE	25013-15-4	246-562-2	10 to 20%
BENZOYL PEROXIDE	94-36-0	202-327-6	10 to 15%
NONYLBENZOATE, BRANCHED AND LINEAR	670241-72-2	447-010-5	5 to 10%
TITANIUM DIOXIDE	13463-67-7	236-675-5	>0.5 to <1%
ZINC STEARATE	557-05-1	209-151-9	1 to 5%

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>Eye</b>	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
<b>Inhalation</b>	If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form. Rinse mouth with water provided person is conscious.
<b>First aid facilities</b>	Eye wash facilities and safety shower should be available.

#### **4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

#### **4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

---

## **5. FIRE FIGHTING MEASURES**

---

### **5.1 Extinguishing media**

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

### **5.2 Special hazards arising from the substance or mixture**

Flammable - potentially explosive vapour. May evolve toxic gases (carbon oxides, benzene, phenyls, styrene) when heated to decomposition. Styrene will polymerise readily at elevated temperatures and may violently rupture sealed containers. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, etc when handling.

### **5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

### **5.4 Hazchem code**

2Y  
2 Fine Water Spray.  
Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

---

## **6. ACCIDENTAL RELEASE MEASURES**

---

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Ventilate area where possible.

### **6.2 Environmental precautions**

Prevent product from entering drains and waterways.

### **6.3 Methods of cleaning up**

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

### **6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

---

## **7. HANDLING AND STORAGE**

---

### **7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Store between 5°C and 25°C.

### **7.3 Specific end uses**

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Benzoyl peroxide	SWA [AUS]	--	5	--	--
Titanium dioxide (a)	SWA [AUS]	--	10	--	--
Vinyl toluene	SWA [AUS]	50	242	100	483

#### Biological limits

No biological limit values have been entered for this product.

### 8.2 Exposure controls

#### Engineering controls

Avoid inhalation. Use in well ventilated areas. If capsules/ cartridges are damaged (bulk), mechanical explosion proof extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

#### PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear barrier gloves.
- Body** Wear coveralls.
- Respiratory** Where an inhalation risk exists, wear a Type A (Organic vapour) respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	COLOURED SOLID
<b>Odour</b>	CHARACTERISTIC ODOUR
<b>Flammability</b>	FLAMMABLE
<b>Flash point</b>	23°C to 60.5°C
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	NOT AVAILABLE
<b>Relative density</b>	1.5 to 1.75
<b>Solubility (water)</b>	INSOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT AVAILABLE
<b>Lower explosion limit</b>	NOT AVAILABLE
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Styrene may polymerise with violent rupture/explosion.

**10.4 Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with combustible materials, oxidising agents (e.g. hypochlorites), reducing agents (e.g. sulphites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), metals and amines.

**10.6 Hazardous decomposition products**

May evolve toxic gases (carbon oxides, benzene, phenyls, styrene) when heated to decomposition.

---

**11. TOXICOLOGICAL INFORMATION**

---

**11.1 Information on toxicological effects**

**Acute toxicity** Based on available data, the classification criteria are not met. Ingestion of large quantities may result in nausea, vomiting, abdominal pain and diarrhoea.

**Information available for the ingredients:**

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
BENZOYL PEROXIDE	5700 mg/kg (mouse)	> 1000 mg/kg (mammal)	--
TITANIUM DIOXIDE	5000 mg/kg (rat)	--	3.43 - 6.82 mg/L air (rat)

**Skin** Due to product encapsulation, the potential for skin contact with contents is reduced. If the container is damaged, contact may result in irritation, redness, pain, rash, dermatitis and possible burns. Effects may be delayed.

**Eye** Due to product encapsulation, the potential for eye contact with contents is reduced. If the container is damaged, direct contact may result in irritation, lacrimation and burns.

**Sensitisation** May cause an allergic skin reaction. This product is not classified as a respiratory sensitiser.

**Mutagenicity** Insufficient data available to classify as a mutagen.

**Carcinogenicity** Due to the product encapsulation, exposure to contents is not anticipated with normal use.

**Reproductive** Styrene is suspected of damaging the unborn child.

**STOT - single exposure** Over exposure may result in irritation of the nose and throat, coughing, nausea, vomiting, dizziness and breathing difficulties. High level exposure may result in respiratory paralysis and unconsciousness.

**STOT - repeated exposure** Due to product encapsulation, the potential for exposure to the contents is reduced. Not classified as causing organ damage from repeated exposure.

**Aspiration** Not classified as causing aspiration.

---

**12. ECOLOGICAL INFORMATION**

---

**12.1 Toxicity**

Very toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

No information provided.

**12.3 Bioaccumulative potential**

No information provided.

**12.4 Mobility in soil**

No information provided.

**12.5 Other adverse effects**

If released to the atmosphere, styrene will react rapidly with both hydroxyl radicals and ozone with a combined calculated half-life of about 5 hours. If released to environmental bodies of water, styrene will volatilise relatively rapidly and biodegrade, but is not expected to hydrolyse. If released to soil it will biodegrade and have low soil mobility.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

<b>Waste disposal</b>	For small quantities, mix with other component/s, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required). Ensure protective equipment is worn when mixing. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

### 14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	3269	3269	3269
<b>14.2 Proper Shipping Name</b>	POLYESTER RESIN KIT, liquid base material	POLYESTER RESIN KIT, liquid base material	POLYESTER RESIN KIT, liquid base material
<b>14.3 Transport hazard class</b>	3	3	3
<b>14.4 Packing Group</b>	III	III	III

#### 14.5 Environmental hazards

Marine Pollutant.

#### 14.6 Special precautions for user

<b>Hazchem code</b>	2Y
<b>EmS</b>	F-E, S-D
<b>Other information</b>	The environmentally hazardous substance mark is not required when transported in packages of less than 5 kg/L (UN Model Regulations: Special Provision 375; IATA: Special Provision A197; IMDG: Special Provision 969) or less than 500 kg/L by Australian Road and Rail.

### 15. REGULATORY INFORMATION

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

<b>Poison schedule</b>	Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Classifications</b>	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
<b>Inventory listings</b>	<b>AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)</b> All components are listed on AIIC, or are exempt.

### 16. OTHER INFORMATION

<b>Additional information</b>	<p>ORGANIC PEROXIDES: Fires involving organic peroxides can be intense and move rapidly due to product rapid decomposition with release of oxygen and may involve explosions. If spilt on combustible materials it may spontaneously ignite. A diluent is often added to organic peroxides to reduce shock sensitivity.</p> <p>IARC GROUP 2B - POSSIBLE HUMAN CARCINOGEN. This product contains an ingredient which has demonstrated sufficient evidence to have been classified by the International Agency for Research into Cancer (IARC) as possibly carcinogenic to humans and whose use should be strictly monitored and controlled.</p>
-------------------------------	--

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

**Prepared by**

Risk Management Technologies  
5 Ventnor Ave, West Perth  
Western Australia 6005  
Phone: +61 8 9322 1711  
Fax: +61 8 9322 1794  
Email: info@rmt.com.au  
Web: www.rmtglobal.com

**[ End of SDS ]**