



Infosafe No™	1CHD9	Issue Date : May 2018	RE-ISSUED by CHEMSUPP
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Product Name : **RESIN**

Classified as hazardous

**1. Identification**

<b>GHS Product Identifier</b>	RESIN	
<b>Company Name</b>	CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)	
<b>Address</b>	38 - 50 Bedford Street GILLMAN SA 5013 Australia	
<b>Telephone/Fax Number</b>	Tel: (08) 8440-2000 Fax: (08) 8440-2001	
<b>Recommended use of the chemical and restrictions on use</b>	Hot-melt and pressure sensitive adhesives, mastics and sealants, varnishes, ester gum, soldering compounds, core oils, insulating compounds, soaps, paper sizing, printing inks, polyesters and raw material for synthetic resins.	
<b>Other Names</b>	<b>Name</b>	<b>Product Code</b>
	RESIN TG	RT002
	Rosin gum	
	Gum rosin	
	Colophony	
	Rosin	
<b>Other Information</b>	EMERGENCY CONTACT NUMBER: +61 08 8440 2000 Business hours: 8:30am to 5:00pm, Monday to Friday.	

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

**2. Hazard Identification**

<b>GHS classification of the substance/mixture</b>	Sensitization - Skin: Category 1
<b>Signal Word (s)</b>	WARNING
<b>Hazard Statement (s)</b>	H317 May cause an allergic skin reaction.
<b>Pictogram (s)</b>	Exclamation mark



<b>Precautionary statement – Prevention</b>	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing.
<b>Precautionary statement – Response</b>	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse.
<b>Precautionary statement – Disposal</b>	P501 Dispose of contents/container to an approved waste disposal plant.

**3. Composition/information on ingredients**

<b>Chemical Characterization</b>	Solid
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**Information on Composition** Mainly a mixture of resin acids. Up to 10% may consist of other acids and neutral compounds.

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>	<u>Hazard Symbol</u>	<u>Risk Phrase</u>
	Rosin Gum	8050-09-7	100 %	Xi	R43

**4. First-aid measures**

<b>Inhalation</b>	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.
<b>Skin</b>	Wash affected area thoroughly with copious amounts of running water. Remove contaminated clothing and wash before reuse. Seek medical attention in severe cases, or if irritation develops.
<b>Eye contact</b>	In case of contact with eyes, wash with running water holding eyelids open. Take care not to rinse contaminated water into a non-affected eye. In all cases of eye contamination it is a sensible precaution to seek medical advice.
<b>First Aid Facilities</b>	Eye wash and normal washroom facilities.
<b>Advice to Doctor</b>	Treat symptomatically and supportively.
<b>Protection for First Aiders</b>	No action shall be taken involving any personal risk or without suitable training.
<b>Other Information</b>	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

**5. Fire-fighting measures**

<b>Hazards from Combustion Products</b>	Irritating and highly toxic fumes, smoke and gases, including formaldehyde, acetone, methanol, aldehydes, carbon dioxide, carbon monoxide, methane, ethane, and acids.
<b>Specific Methods</b>	Small fire: Use dry chemical, CO <sub>2</sub> , water spray or foam. Large fire: Use water spray, fog or foam.
<b>Decomposition Temp.</b>	>200 °C (fumes produced).

**6. Accidental release measures**

<b>Personal Precautions</b>	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
<b>Personal Protection</b>	Use personal protective equipment listed in Section 8.
<b>Clean-up Methods - Small Spillages</b>	Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

**7. Handling and storage**

<b>Precautions for Safe Handling</b>	Avoid ingestion and inhalation of dust and fumes. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Minimize dust generation and accumulation. Keep containers closed when not in use. Use only with adequate ventilation. Wear appropriate protective equipment. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed, labelled, corrosion-resistant containers, in a cool, dry, well-ventilated area away from incompatible substances. Store away from oxidizing agents. Store away from heat all sources of ignition. Prevent static discharge.
<b>Storage Temperatures</b>	Store at room temperature (15 to 25 °C recommended).

**8. Exposure controls/personal protection**

<b>Other Exposure Information</b>	A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Safe Work Australia for this product. There is a blanket limit of 10 mg/m <sup>3</sup> for dusts when limits have not otherwise been established. A time weighted average (TWA) has been established for Rosin core solder pyrolysis products (as formaldehyde) (Safe Work Australia) of 0.1 mg/m <sup>3</sup> . The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.
<b>Appropriate engineering controls</b>	In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other



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<b>Respiratory Protection</b>	<p>methods.</p> <p>Fumes forms a sticky residue in pumps, fans and ductwork unless these are protected. This residue can rapidly lead to poor extraction, premature pump/fan failure and duct blockage. Suitable filters should be provided to protect against performance loss. Solder fume particles are typically 0.5 -1.0 micron in diameter, requiring high-efficiency filters for effective removal. A planned maintenance schedule should be devised and implemented in consultation with the system manufacturer or supplier, to include regular replacement of filters.</p> <p>Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.</p>
<b>Eye Protection</b>	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.
<b>Hand Protection</b>	Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336. Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Excellent: Nitrile rubber gloves Fair: Vinyl gloves.
<b>Personal Protective Equipment</b>	The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.
<b>Footwear</b>	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
<b>Body Protection</b>	Clean clothing or protective clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
<b>Hygiene Measures</b>	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**9. Physical and chemical properties**

<b>Form</b>	Solid
<b>Appearance</b>	Pale yellow to amber solidified mass or fragments.
<b>Odour</b>	Slight turpentine odour; faint piny odour.
<b>Decomposition Temperature</b>	>200 °C (fumes produced).
<b>Melting Point</b>	~ 70-80 °C.
<b>Boiling Point</b>	> 300 °C at 1013 hPa; 280 °C (decomposition).
<b>Solubility in Water</b>	Practically insoluble (130 mg/l at 20 °C).
<b>Solubility in Organic Solvents</b>	Soluble in alcohol, oils, diethyl ether, benzene, carbon tetrachloride, glacial acetic acid, aliphatic, aromatic, and chlorinated hydrocarbons.
<b>Specific Gravity</b>	1.05 - 1.09
<b>Vapour Pressure</b>	Negligible (< 0.1 hPa).
<b>Evaporation Rate</b>	Negligible.
<b>Physical State</b>	Hard and friable at room temperature; soft and very sticky when warm.
<b>Flash Point</b>	187 °C (CC); 205 °C (OC); ca. 225 °C.
<b>Flammability</b>	Combustible.
<b>Explosion Properties</b>	Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
<b>Other Information</b>	Bulk density: 1.055 at 150 °C.

**10. Stability and reactivity**

<b>Chemical Stability</b>	Stable under normal temperatures pressures and conditions.
<b>Conditions to Avoid</b>	Excess heat, high temperatures, dust generation and incompatible materials.
<b>Incompatible Materials</b>	Strong acids, alkalies and oxidizing agents.



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**Hazardous Decomposition Products** Irritating and toxic smoke, fumes and gases, formaldehyde, carbon monoxide and carbon dioxide.**Hazardous Polymerization** Will not occur.**11. Toxicological Information**

**Ingestion** Ingestion of large quantities may cause irritation of the gastrointestinal tract and stomach, and produce gastrointestinal symptoms, including nausea and vomiting.

**Inhalation** Inhalation of dust may irritate the respiratory system. When heated, particularly to temperatures above 200°C (such as during soldering of fluxes containing rosin), hazardous fumes are formed. Early symptoms from fume exposure can include: irritation to the upper respiratory tract and eyes, watering, prickly eyes, running or blocked nose, sore throat, coughing, wheezing, tight chest and breathlessness. Symptoms may start within minutes of exposure or be delayed for several hours. Inhalation of fumes may cause allergic respiratory reaction and can lead to occupational asthma or make existing asthmatic conditions worse. Once asthma has developed, the condition is permanent and irreversible and even small exposures to fume can lead to asthma attacks which may occur immediately or be delayed for several hours.

**Skin** Contact may cause skin irritation. Solid, dust or fumes can cause dermatitis. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**Eye** May cause mechanical eye irritation, resulting in tearing and stinging. Fumes can also cause irritation to the eyes, with redness, tearing and discomfort.

**Skin Sensitisation** Guinea pig maximization test, guinea pig, Result: sensitizing, Classification: sensitizing, Remark: Investigated substance: Chinese gum rosin of pharmaceutical quality.  
Sensitization, Freund's complete adjuvant test, guinea pig, Result: ambiguous, Remark: Several resin acids and related products were investigated. 4 resin acids, laevopimaric, abietic, podocarpic and tetrahydroabietic acid proved to be weak sensitizers. Neoabietic, dehydroabietic isopimaric acid and larixol remained negative. The neutral fraction was also found to be partially involved in colophony allergy.  
Guinea pig maximization test, guinea pig, Result: ambiguous, Remark: Animals induced with purified abietic acid (99.8%) showed no significant reactions when challenged (10%) with the pure acid. However the animals reacted to the abietic acid of commercial quality (score up to 50%) and gum rosin (score up to 20%).

**Carcinogenicity** Not listed in the IARC Monographs.

**Chronic Effects** Repeated or prolonged skin contact with the solid state can cause contact dermatitis, an allergic reaction. It can also cause eczema. Repeated or prolonged inhalation of the rosin dust or smoke can cause allergic respiratory reaction (asthma).

**12. Ecological information**

**Ecological Information** No ecological problems are to be expected when the product is handled and used with due care and attention.

**Persistence and degradability** Biodegradability aerobic - Exposure time 28 d  
Result: 58 % - Not readily biodegradable.  
(OECD Test Guideline 301B)

**13. Disposal considerations**

**Disposal Considerations** Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.

**14. Transport information**

**Transport Information** Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

**15. Regulatory information**

**Regulatory Information** Listed in the Australian Inventory of Chemical Substances (AICS).

**Poisons Schedule** Not Scheduled

**16. Other Information**

**Literature References** 'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.  
Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons,



chem-supply

# Safety Data Sheet

infosafe  
CS: 1.7.2

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Inc., NY, 1997.  
 National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.  
 Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011.  
 Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.  
 Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.  
 Safe Work Australia, 'Hazardous Substances Information System, 2005'.  
 Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'.  
 Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'.  
 Paul McCarthy Ph. (08) 8440 2000 **DISCLAIMER STATEMENT:**

**Contact  
Person/Point**

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**Empirical Formula &  
Structural Formula**

Resin acids of the abietic and pimaric types, having the general formula of C<sub>19</sub>H<sub>29</sub>COOH and having a phenanthrene nucleus.  
 ...End Of MSDS...

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