



# SAFETY DATA SHEET GUM ROSIN REVISION 5, DATE 16 SEP 19

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Gum Rosin</b>
<b>Other Names</b>	Colophony; Disproportionated rosin; Gum Rosin WW
<b>Uses</b>	Used in hot-melt, pressure sensitive and solvent adhesives, to increase tackiness and improve bonding strength.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	Unspecified
<b>Chemical Name</b>	Rosin
<b>Product Description</b>	No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)**

Not Scheduled



## Globally Harmonised System

**Hazard Classification** Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**Hazard Categories** Sensitisation (Skin) - Category 1

**Pictograms**



**Signal Word** Warning

**Hazard Statements** **H317** May cause an allergic skin reaction.

<b>Precautionary Statements</b>	Prevention	<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.
		<b>P280</b>	Wear protective gloves.
		<b>P261</b>	Avoid breathing dust/fumes.
	Response	<b>P302 + P352</b>	IF ON SKIN: Wash with plenty of water.
		<b>P333 + P313</b>	If skin irritation or rash occurs: Get medical advice.
		<b>P363</b>	Wash contaminated clothing before reuse.
	Disposal	<b>P501</b>	Dispose of contents/container in accordance with local / regional / national / international regulations.

## National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Rosin	Unspecified	8050-09-7	100 %

## 4. FIRST AID MEASURES

## Description of necessary measures according to routes of exposure

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth with water, then drink a glass of water. Do not induce vomiting. Get medical advice/attention. Never give anything by mouth to an unconscious person.
<b>Eye</b>	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
<b>Skin</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs, get medical advice/attention.
<b>Inhaled</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms

persist, get medical advice/attention.

**Advice to Doctor**

Treat symptomatically.

**Medical Conditions Aggravated by Exposure**

May cause an allergic skin reaction.

**5. FIRE FIGHTING MEASURES**

<b>General Measures</b>	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
<b>Flammability Conditions</b>	Combustible material; May burn but does not ignite readily.
<b>Extinguishing Media</b>	Use dry chemical, Carbon dioxide (CO <sub>2</sub> ), foam or water spray for extinction.
<b>Fire and Explosion Hazard</b>	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
<b>Hazardous Products of Combustion</b>	On burning will emit toxic fumes, including oxides of Carbon.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
<b>Personal Protective Equipment</b>	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
<b>Flash Point</b>	218 °C
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

**6. ACCIDENTAL RELEASE MEASURES**

<b>General Response Procedure</b>	Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material - Slippery when spilt. Avoid accidents, clean up immediately. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Collect spillage (sweep or vacuum up) and seal in properly labelled containers for disposal (see SECTION 13).
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
<b>Decontamination</b>	No information available.
<b>Environmental Precautionary Measures</b>	Prevent entry into drains and waterways. If contamination of sewers or waterways has occurred advise local emergency services.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

**7. HANDLING AND STORAGE**

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). <b>WARNING!</b> May form combustible dust concentrations in air (during processing). Avoid excess dust in the atmosphere since this is an explosion hazard in the presence of electrical sparks and static discharges. Avoid flammable vapours when removing shrink-wrap film from pallets, since these may ignite due to static electricity. Avoid overheating, especially by direct contact with naked flames. Avoid static build-up when emptying packaging. Earth all equipment and attach a grounding cable to the packaging grounding connection.
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<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use - check regularly for spills. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10).
<b>Container</b>	The packaging material should have reasonable moisture and air barrier properties.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m <sup>3</sup> (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m <sup>3</sup> ; TWA = 3 mg/m <sup>3</sup> (respirable dust).
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protection Equipment</b>	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses. - Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Nitrile rubber. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Transparent solid
<b>Odour</b>	Typical, rosin
<b>Colour</b>	Pale yellow - amber
<b>pH</b>	No Data Available
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	>=70 °C (Softening point)
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Negligible solubility in water
<b>Specific Gravity</b>	1.060 - 1.085
<b>Flash Point</b>	218 °C
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	No Data Available

Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	Essentially non-volatile
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	This product may react oxidizing agents. Uncontrolled reaction may lead to a fire/explosion.
Properties That May Initiate or Contribute to Fire Intensity	Combustible material.
Reactions That Release Gases or Vapours	On burning will emit toxic fumes, including oxides of Carbon.
Release of Invisible Flammable Vapours and Gases	No information available.

## 10. STABILITY AND REACTIVITY

General Information	This product has limited chemical reactivity. This product may react oxidizing agents. Uncontrolled reaction may lead to a fire/explosion.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Avoid generating dust. Keep away from heat and sources of ignition. Take action to prevent static discharges.
Materials to Avoid	Incompatible/reactive with strong oxidising agents, strong acids, strong alkalis.
Hazardous Decomposition Products	No hazardous chemicals are known to be formed during the use of this product. On burning will emit toxic fumes, including oxides of Carbon.
Hazardous Polymerisation	No information available.

## 11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"><li>- Acute toxicity: Not acutely toxic following oral or dermal exposure. Low vapour pressure precludes inhalation exposure. Swallowing large amounts may cause nausea and vomiting.</li><li>- Skin corrosion/sensitisation: Contact with skin may result in irritation.</li><li>- Eye damage/irritation: May cause physical irritation to the eyes.</li><li>- Respiratory/skin sensitisation: May cause an allergic skin reaction.</li><li>- Germ cell mutagenicity: Not mutagenic or clastogenic in bacterial and/or mammalian cells in vitro.</li><li>- Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</li></ul>
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- Reproductive toxicity: Not classified for reproductive or developmental toxicity.
- STOT (single exposure): Breathing in dust may result in respiratory irritation.
- STOT (repeated exposure): No information available.
- Aspiration toxicity: No information available.

**Acute****Ingestion**

Acute toxicity (Oral):  
- LD50, Rat: >2,000 mg/kg bw.

**Other**

Acute toxicity (Dermal):  
- LD50, Rat: >2,000 mg/kg bw.

**Carcinogen Category**

None

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Aquatic toxicity:  
- Acute LC50, Fish (Brachydanio rerio): 60.3 mg/l (96 h) static test [OECD Test Guideline 203].

**Persistence/Degradability**

This product will be slowly biodegradable. Not readily biodegradable (58 %, 28 d), aerobic [OECD Test Guideline 301B].

**Mobility**

No information available.

**Environmental Fate**

Prevent entry into drains and waterways.

**Bioaccumulation Potential**

No information available.

**Environmental Impact**

No Data Available

**13. DISPOSAL CONSIDERATIONS****General Information**

Dispose of contents/container in accordance with local/regional/national regulations.

**Special Precautions for Land Fill**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**14. TRANSPORT INFORMATION****Land Transport (Australia)**

ADG Code

**Proper Shipping Name**

Gum Rosin

**Class**

No Data Available

**Subsidiary Risk(s)**

No Data Available

No Data Available

**UN Number**

No Data Available

**Hazchem**

No Data Available

**Pack Group**

No Data Available

**Special Provision**

No Data Available

**Comments**

NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (Malaysia)**

ADR Code

Proper Shipping Name	Gum Rosin
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (New Zealand)**

NZS5433

Proper Shipping Name	Gum Rosin
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (United States of America)**

US DOT

Proper Shipping Name	Gum Rosin
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Sea Transport**

IMDG Code

Proper Shipping Name	Gum Rosin
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

**Air Transport**

IATA DGR

Proper Shipping Name	Gum Rosin
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road &amp; Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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**15. REGULATORY INFORMATION**

General Information	No Data Available
Poisons Schedule (Aust)	Not Scheduled

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Additives Process Chemicals and Raw Materials Subsidiary Hazard Group Standard 2020 HSR002503 *HSR002804 (Revoked)
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**National/Regional Inventories**

Australia (AIIIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	232-475-7
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed



Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

## 16. OTHER INFORMATION

Related Product Codes	GUROSI0100, GUROSI0200, GUROSI0300, GUROSI0301, GUROSI0400, GUROSI1000, GUROSI1001, GUROSI1002, GUROSI1003, GUROSI1004, GUROSI1005, GUROSI1006, GUROSI1007, GUROSI1008, GUROSI1009, GUROSI1010, GUROSI1011, GUROSI1012, GUROSI1013, GUROSI1014, GUROSI1015, GUROSI1016, GUROSI1017, GUROSI1018, GUROSI1019, GUROSI1020, GUROSI1021, GUROSI1022, GUROSI1023, GUROSI1024, GUROSI1025, GUROSI1026, GUROSI1100, GUROSI1200, GUROSI1300, GUROSI1301, GUROSI1400, GUROSI1401, GUROSI1410, GUROSI1411, GUROSI1415, GUROSI1500, GUROSI1501, GUROSI1502, GUROSI1600, GUROSI1700, GUROSI1800, GUROSI1801, GUROSI1802, GUROSI2000, GUROSI2001, GUROSI2002, GUROSI2003, GUROSI2100, GUROSI2200, GUROSI2210, GUROSI2250, GUROSI2300, GUROSI2500, GUROSI2600, GUROSI2700, GUROSI2800, GUROSI3000, GUROSI3001, GUROSI3002, GUROSI3100, GUROSI3200, GUROSI3500, GUROSI3600, GUROSI3700, GUROSI4000, GUROSI4001, GUROSI4002, GUROSI4003, GUROSI4100, GUROSI4200, GUROSI4300, GUROSI4400, GUROSI4500, GUROSI4501, GUROSI4600, GUROSI4700, GUROSI4800, GUROSI4801, GUROSI4900, GUROSI4901, GUROSI4902, GUROSI4903, GUROSI4904, GUROSI4905, GUROSI4906, GUROSI4907, GUROSI4908, GUROSI4909, GUROSI4910, GUROSI4911, GUROSI4912, GUROSI4913, GUROSI4914, GUROSI4915, GUROSI4916, GUROSI4917, GUROSI4918, GUROSI4919, GUROSI4920, GUROSI4921, GUROSI4922, GUROSI4923, GUROSI4924, GUROSI4925, GUROSI4926, GUROSI4927, GUROSI5000, GUROSI5001, GUROSI5002, GUROSI5003, GUROSI5004, GUROSI5100, GUROSI5200, GUROSI5300, GUROSI5400, GUROSI5500, GUROSI5600, GUROSI5700, GUROSI5800, GUROSI5900, GUROSI6000, GUROSI6001, GUROSI6100, GUROSI6500, GUROSI7000, GUROSI7001, GUROSI7100, GUROSI7101, GUROSI7200, GUROSI7300, GUROSI7400, GUROSI7500, GUROSI7501, GUROSI8000, GUROSI8100, GUROSI8101, GUROSI8102, GUROSI8103, GUROSI8104, GUROSI8200, GUROSI8500, GUROSI8501, GUROSI8502, GUROSI9000, GUROSI9001, GUROSI9100, GUROSI9200, GUROSI9300, GUROSI9301, GUROSI9400, GUROSI9500, GUROSI9600, GUROSI9700, GUROSI9800, GUROSR3300
Revision	5
Revision Date	16 Sep 2019
Reason for Issue	Updated SDS
Key/Legend	<p>&lt; Less Than</p> <p>&gt; Greater Than</p> <p><b>AICS</b> Australian Inventory of Chemical Substances</p> <p><b>atm</b> Atmosphere</p> <p><b>CAS</b> Chemical Abstracts Service (Registry Number)</p> <p><b>cm<sup>2</sup></b> Square Centimetres</p> <p><b>CO<sub>2</sub></b> Carbon Dioxide</p> <p><b>COD</b> Chemical Oxygen Demand</p> <p><b>deg C (°C)</b> Degrees Celcius</p> <p><b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand</p> <p><b>deg F (°F)</b> Degrees Fahrenheit</p> <p><b>g</b> Grams</p> <p><b>g/cm<sup>3</sup></b> Grams per Cubic Centimetre</p> <p><b>g/l</b> Grams per Litre</p> <p><b>HSNO</b> Hazardous Substance and New Organism</p> <p><b>IDLH</b> Immediately Dangerous to Life and Health</p> <p><b>immiscible</b> Liquids are insoluable in each other.</p> <p><b>inHg</b> Inch of Mercury</p> <p><b>inH<sub>2</sub>O</b> Inch of Water</p> <p><b>K</b> Kelvin</p> <p><b>kg</b> Kilogram</p> <p><b>kg/m<sup>3</sup></b> Kilograms per Cubic Metre</p> <p><b>lb</b> Pound</p>

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

**ltr** or **L** Litre

**m<sup>3</sup>** Cubic Metre

**mbar** Millibar

**mg** Milligram

**mg/24H** Milligrams per 24 Hours

**mg/kg** Milligrams per Kilogram

**mg/m<sup>3</sup>** Milligrams per Cubic Metre

**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

**mm** Millimetre

**mmH<sub>2</sub>O** Millimetres of Water

**mPa.s** Millipascals per Second

**N/A** Not Applicable

**NIOSH** National Institute for Occupational Safety and Health

**NOHSC** National Occupational Health and Safety Commission

**OECD** Organisation for Economic Co-operation and Development

**Oz** Ounce

**PEL** Permissible Exposure Limit

**Pa** Pascal

**ppb** Parts per Billion

**ppm** Parts per Million

**ppm/2h** Parts per Million per 2 Hours

**ppm/6h** Parts per Million per 6 Hours

**psi** Pounds per Square Inch

**R** Rankine

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

**tne** Tonne

**TWA** Time Weighted Average

**ug/24H** Micrograms per 24 Hours

**UN** United Nations

**wt** Weight