

### 1. IDENTIFICATION

<b>Product Name</b>	<b>Gum Rosin</b>
<b>Other Names</b>	Colophony; Disproportionated Rosin; Rosin
<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>	No Data Available
<b>Chemical Name</b>	Gum Rosin
<b>Product Description</b>	This product is transparent solid made from crude gum through distillation with removing gum turpentine. After cooling down, it is hard and fragile with glass cluster and can be used as industrial raw material.

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

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty 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.*

Organisation	Location	Telephone
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.

**Precautionary Statements**

Prevention	<b>P261</b>	Avoid breathing dust/fume/gas/mist/vapours/spray.
	<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.
	<b>P280</b>	Wear protective gloves.
Response	<b>P302 + P352</b>	IF ON SKIN: Wash with plenty of soap and water.
	<b>P333 + P313</b>	If skin irritation or rash occurs: Get medical advice/attention.
	<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)

#### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**HSNO Classifications**

Health Hazards	<b>6.1E</b>	Substances that are acutely toxic –May be harmful, Aspiration hazard
	<b>6.5B</b>	Substances that are contact sensitisers
Environmental Hazards	<b>9.1D</b>	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Gum Rosin	No Data Available	8050-09-7	100.00 %

### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

**Swallowed** Rinse out mouth with water. Drink large quantities of water. Call a doctor. NEVER give anything by mouth to an unconscious person.

**Eye** Treat the solid rosin as an inert particle Wash with water for at least 15 minutes Remove contact lenses for better treatment. If necessary consult a doctor.

<b>Skin</b>	Wash off immediately with plenty of water and soap. Hot rosin splashes should be left infect. If necessary consult a doctor.
<b>Inhaled</b>	Remove to fresh air. Treat any irritation symptomatically. If necessary consult a doctor.
<b>Advice to Doctor</b>	Treat symptomatically based on judgement of doctor and individual reactions of patient. Treat burns as thermal burns. Do not remove the substances from skin immediately as the material will come off through therapy.
<b>Medical Conditions Aggravated by Exposure</b>	Prolonged or repeated skin contact may caused irritation in sensitive subjects.

## 5. FIRE FIGHTING MEASURES

<b>General Measures</b>	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
<b>Flammability Conditions</b>	Product is a combustible solid. May build up electrostatic charge which will act as a source of ignition.
<b>Extinguishing Media</b>	Fight the fire using water spray, sand, dry powder, carbon dioxide or foam. Cool packaging by spraying with water.
<b>Fire and Explosion Hazard</b>	Powder material will form explosive dust/air mixture.
<b>Hazardous Products of Combustion</b>	Carbon dioxide, carbon monoxide.
<b>Special Fire Fighting Instructions</b>	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
<b>Personal Protective Equipment</b>	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
<b>Flash Point</b>	>=218 °C Open Cup
<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>	Eliminate all sources of ignition and ventilate the area. Avoid dust formation. Avoid breathing dust. Do not get water inside the container. Avoid accidents, clean up immediately. Slippery when spilled. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Use clean, non-sparking tools and equipment.
<b>Clean Up Procedures</b>	Sweep up the rosin for use or placed in a container for disposal. Small quantities may be well diluted with water and passed to an effluent / sewage plant. Powder and dust should be sprinkled with water.
<b>Containment</b>	Stop leak if safe to do so. Isolate the danger area.
<b>Environmental Precautionary Measures</b>	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
<b>Evacuation Criteria</b>	Evacuate all unnecessary personnel.
<b>Personal Precautionary Measures</b>	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Handle in a well ventilated area. The conditions of use of this rosin should be examined to try to reduce fumes and dusting. The fine particles and powder should be regarded as an inert, nuisance dust with a threshold limit value of 10 mg/m <sup>3</sup> for the respirator able portion. When emptying, where flammable vapors are present, blanket the vessel with an inert gas and pour this product into a conductive earthed chute. Earth all equipment.
<b>Storage</b>	Product should be stored, in a clean well ventilated area with relative humidity below 70 at ambient temperature. Maintain a clean area by removing dust. Keep away from heat, sparks and other sources of ignition. No smoking. The product is prone to slow oxidation and it is recommended that it be used on a first-in first-out basis. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
<b>Container</b>	Store in original packaging as approved by manufacturer. None. The packaging material should have reasonable moisture and air barrier properties.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m <sup>3</sup> (for inspirable dust) and 3mg/m <sup>3</sup> (for respirable dust).
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available on biological limit values for this product.
<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. Normal industrial hygiene measures should be sufficient. The conditions of use of this rosin should be examined to try to reduce fumes and dusting.
<b>Personal Protection Equipment</b>	RESPIRATOR: Wear a dust mask/respirator when handling this product. A self contained breathing apparatus should be used to avoid inhalation of the product (AS1715/1716). EYES: Safety glasses with side shields. Wear a face shield when working with molten material. (AS1336/1337). HANDS: Impervious gloves. (AS2161). CLOTHING: Long-sleeved protective coveralls and safety footwear. When exposed to HOT material wear protective clothing that provides protection against thermal burns. (AS3765/2210).
<b>Special Hazards Precautions</b>	Impervious gloves. Use goggles. Use a dust mask. Good ventilation should be sufficient to control airborne levels.
<b>Work Hygienic Practices</b>	Eye bath, washing facilities.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Cool Solid with glass cluster.
<b>Odour</b>	Typical rosin odor.
<b>Colour</b>	Slightly yellow, Pale yellow, Yellow, Deep Yellow, Yellow Brown, Yellow Red.
<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>	approx 300 @ 0.67 kPa °C
<b>Melting Point</b>	110 - 135 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Insoluble in cold water
<b>Specific Gravity</b>	1.060 - 1.085
<b>Flash Point</b>	>=218 °C Open Cup
<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

<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	Slightly soluble in hot water. Soluble in ethanol, ether, acetones, toluene, carbon disulfide, dichloroethane, turpentine, petroleum ether, gasoline, oils, aqueous alkali etc. Softening Point (°C) =70 Burning Point: 480~500 deg C
<b>Potential for Dust Explosion</b>	Dust may form explosive mixtures with air. This product may react oxidizing agents. Uncontrolled reaction may lead to a fire / explosion.
<b>Fast or Intensely Burning Characteristics</b>	No Data Available
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No Data Available
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No Data Available
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	No Data Available
<b>Reactions That Release Gases or Vapours</b>	No Data Available
<b>Release of Invisible Flammable Vapours and Gases</b>	No Data Available

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	This product has limited chemical reactivity. No hazardous chemicals are known to be formed during the use of this product. This product may react oxidizing agents. Uncontrolled reaction may lead to a fire / explosion
<b>Chemical Stability</b>	This product is chemically stable.
<b>Conditions to Avoid</b>	Avoid excess dust in the atmosphere since this is an explosion hazard in the presence of electrical sparks and static discharges. Avoid flammable vapors 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 quipment and attach a grounding cable to the packaging grounding connection.
<b>Materials to Avoid</b>	Material reacts with strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	No Data Available
<b>Hazardous Polymerisation</b>	None

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	No Data Available
<b>SkinIrritant</b>	May cause sensitisation by skin contact.
<b>EyeIrritant</b>	The fine particles and powder should be regarded as an inert nuisance dust.

<b>Inhalation</b>	Noxious and irritating fumes may be released on overheating this product. The thermal decomposition of these Vapors at about 300 °C may give risk to products which, if not ventilated adequately, could cause asthmatic attacks in a small percentage of exposed workers.
<b>Carcinogen Category</b>	No Data Available

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Ecotoxicity information not available.
<b>Persistence/Degradability</b>	This product will be slowly biodegradable.
<b>Mobility</b>	Mobility information not available.
<b>Environmental Fate</b>	Avoid contaminating waterways, drains and sewers.
<b>Bioaccumulation Potential</b>	Bioaccumulation Potential not available.
<b>Environmental Impact</b>	No Data Available

## 13. DISPOSAL CONSIDERATIONS

<b>General Information</b>	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
<b>Special Precautions for Land Fill</b>	Contact a specialist disposal company or the local waste regulator for advice. Incinerate at an approved site following all local regulations.

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)

ADG Code

<b>Proper Shipping Name</b>	Gum Rosin
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

### Land Transport (Malaysia)

ADR

<b>Proper Shipping Name</b>	Gum Rosin
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available

**Special Provision** No Data Available

**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

**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

**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

**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

**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)

**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** HSR002804

**National/Regional Inventories**

<b>Australia (AICS)</b>	Listed
<b>Canada (DSL)</b>	Listed
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Listed
<b>Europe (EINECS)</b>	232-475-7
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Listed
<b>Korea (KECI)</b>	Listed
<b>Malaysia (EHS Register)</b>	Not Determined
<b>New Zealand (NZIoC)</b>	Listed
<b>Philippines (PICCS)</b>	Listed
<b>Switzerland (Giftliste 1)</b>	Not Determined
<b>Switzerland (Inventory of Notified Substances)</b>	Not Determined
<b>Taiwan (NCSR)</b>	Not Determined
<b>USA (TSCA)</b>	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, GUROSI2300, GUROSI2500, GUROSI2600, GUROSI3000, GUROSI3001, GUROSI3002, GUROSI3100,



GUOSI3200, GUOSI3500, GUOSI3600, GUOSI3700, GUOSI4000, GUOSI4001, GUOSI4002, GUOSI4003, GUOSI4100, GUOSI4200, GUOSI4300, GUOSI4400, GUOSI4500, GUOSI4501, GUOSI4600, GUOSI4700, GUOSI4800, GUOSI4801, GUOSI4900, GUOSI4901, GUOSI4902, GUOSI4903, GUOSI4904, GUOSI4905, GUOSI4906, GUOSI4907, GUOSI4908, GUOSI4909, GUOSI4910, GUOSI4911, GUOSI4912, GUOSI4913, GUOSI4914, GUOSI4915, GUOSI4916, GUOSI4917, GUOSI4918, GUOSI4919, GUOSI4920, GUOSI4921, GUOSI4922, GUOSI4923, GUOSI4924, GUOSI4925, GUOSI4926, GUOSI4927, GUOSI5000, GUOSI5001, GUOSI5002, GUOSI5003, GUOSI5004, GUOSI5100, GUOSI5200, GUOSI5300, GUOSI5400, GUOSI5500, GUOSI5600, GUOSI5700, GUOSI5800, GUOSI5900, GUOSI6000, GUOSI6001, GUOSI6100, GUOSI6500, GUOSI7000, GUOSI7001, GUOSI7100, GUOSI7101, GUOSI7200, GUOSI7300, GUOSI7400, GUOSI7500, GUOSI7501, GUOSI8000, GUOSI8100, GUOSI8101, GUOSI8102, GUOSI8103, GUOSI8104, GUOSI8200, GUOSI8500, GUOSI8501, GUOSI8502, GUOSI9000, GUOSI9001, GUOSI9100, GUOSI9200, GUOSI9300, GUOSI9301, GUOSI9400, GUOSI9500, GUOSI9600, GUOSI9700, GUOSI9800, GUOSR3300

**Revision**

4

**Revision Date**

23 Feb 2016

**Reason for Issue**

Updated SDS

**Key/Legend**

< Less Than

> Greater Than

**AICS** Australian Inventory of Chemical Substances

**atm** Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

**cm<sup>2</sup>** Square Centimetres

**CO<sub>2</sub>** Carbon Dioxide

**COD** Chemical Oxygen Demand

**deg C (°C)** Degrees Celcius

**EPA (New Zealand)** Environmental Protection Authority of New Zealand

**deg F (°F)** Degrees Farenheit

**g** Grams

**g/cm<sup>3</sup>** Grams per Cubic Centimetre

**g/l** Grams per Litre

**HSNO** Hazardous Substance and New Organism

**IDLH** Immediately Dangerous to Life and Health

**immiscible** Liquids are insoluable in each other.

**inHg** Inch of Mercury

**inH<sub>2</sub>O** Inch of Water

**K** Kelvin

**kg** Kilogram

**kg/m<sup>3</sup>** Kilograms per Cubic Metre

**lb** Pound

**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