

1. IDENTIFICATION

Product Name	Gum Turpentine
Other Names	Gum Turpentine Super Grade; Pure Gum Turpentine; Sulfate Turpentine; Turpentine Oil; Turpentine Spirits
Uses	It's an excellent solvent, widely used as raw materials in paint, synthetic camphor, terpineol, synthetic perfume, medicine production, synthetic resin, organic chemical industry, etc.
Chemical Family	No Data Available
Chemical Formula	C ₁₀ H ₁₆
Chemical Name	Gum Turpentine
Product Description	Natural material derived from distillation of sap extracted of Pinus massoniana tree. It is a kind of natural essential oil, a mixture of various terpenoid and hydrocarbon with special chemical activity, pinene is major component.

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.	2132A E. Dominguez Street Carson CA 90810 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	No. 8, Block G, Ground Floor, Taipan 2 Jalan PJU 1A/3 Ara Damansara 47301, Petaling Jaya, Selangor, Malaysia	+60-3-7843-6833

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) 5

Globally Harmonised System

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

Hazard Categories

Flammable Liquids - Category 3
 Aspiration Hazard - Category 1
 Serious Eye Damage/Irritation - Category 2A
 Skin Corrosion/Irritation - Category 2
 Sensitisation (Skin) - Category 1
 Long-term Hazard To The Aquatic Environment - Category 2

Pictograms



Signal Word

Danger

Hazard Statements

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H312 Harmful in contact with skin.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention	<p>P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/.../equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves/protective clothing/eye protection/face protection. P264 Wash ... thoroughly after handling. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.</p>
Response	<p>P303 + P361 + P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P370 + P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P321 Specific treatment (see ... on this label). P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting. P330 Rinse mouth.</p>

	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P391	Collect spillage.
Storage	P403 + P235	Store in a well-ventilated place. Keep cool.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container to ?

National Transport Commission (Australia)

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

Dangerous Goods Classification

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	Physical Hazards	3.1C	Flammable liquid - medium hazard
	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.3A	Substances that are irritating to the skin
		6.4A	Substances that are irritating to the eye
		6.5B	Substances that are contact sensitisers
Environmental Hazards	9.1C	Substances that are harmful in the aquatic environment	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Turpentine (Wood)	No Data Available	8006-64-2	100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Get medical attention by calling a physician or a poison control centre immediately. Do not induce vomiting or less directed to do by medical personnel. If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Eye	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
Skin	If skin or hair contact occurs, immediately remove any contaminated clothing and flush skin and hair with running water and soap. If swelling, redness, blistering or irritation occurs, seek medical advice. This material can be absorbed through the skin with resultant toxic effects. Seek immediate medical assistance.
Inhaled	Remove victim from exposure to fresh air - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm and at rest. If patient finds breathing difficult, and develops a bluish discoloration of the skin, ensure airways are clear, and have qualified person give oxygen through a face mask. Seek immediate medical advice.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient. Delayed pulmonary oedema may result. The substance can be absorbed into the body by inhalation and may cause respiratory tract irritation.

Medical Conditions Aggravated by Exposure Repeated or prolonged inhalation exposure may cause asthma. Fumes or dust may cause eye irritation or mechanical injury. Repeated or prolonged contact may cause skin irritation.

5. FIRE FIGHTING MEASURES

Flammability Conditions Product is a flammable liquid.

Extinguishing Media Use sand, earth, chemical powder or foam, carbon dioxide.

Hazardous Products of Combustion Flammable Liquid. May cause combustible materials to burn or explode. May burn if heated or ignited. Vapour may form an explosive mixture in air. Evolves irritating and toxic gases on decomposition. Hazardous decomposition products formed under fire conditions: carbon monoxide and carbon dioxide.

Special Fire Fighting Instructions Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing. Prevent fire-fighting water from entering surface water or groundwater.

Personal Protective Equipment 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) or chemical splash suit. 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. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Flash Point 30 - 46 °C Closed cup

Lower Explosion Limit 0.8 %

Upper Explosion Limit No Data Available

Auto Ignition Temperature 220 - 255 °C

Hazchem Code 3Y

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Shut off all possible sources of ignition. Personnel involved in the clean up should wear full protective clothing as listed in section 8. Avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Stop leak if safe to do so. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment.

Clean Up Procedures Do not wash untreated material down the drain or sewer. Contain with sand or earth. Large spills - pump into steel drums and hold for waste disposal. Small spills - absorb material with sand or diatomaceous earth.

Environmental Precautionary Measures Keeping away from drains, surface and ground water.

Evacuation Criteria Evacuate personnel to safe areas

Personal Precautionary Measures Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

7. HANDLING AND STORAGE

Handling This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Keep away from combustible material. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Storage Store in a cool, dry, well-ventilated, fire-proof area. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Ground and bond storage containers. Store away from incompatible materials as listed in section 10. Protect from direct sunlight, heat, static charges, and ignition. This product has a UN classification of 1299 and a Dangerous Goods Class 3 (flammable) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

Container	Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer. SUITABLE: Galvanised Drums.
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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC); Turpentine (wood): 8hr TWA = 557 mg/m ³ (100 ppm), Sen NOTE: 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. Sen Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	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. Use an explosion proof exhaust ventilation system. Vapour heavier than air - prevent concentration in hollows and sumps. Do NOT enter confined spaces where vapour may have collected.
Personal Protection Equipment	RESPIRATOR: Wear a respirator with suitable Type 'A' filter for organic gases and vapours if engineering controls are inadequate (AS1715/1716). EYES: Chemical goggles to prevent splashing in the eyes (AS1336/1337). HANDS: Elbow length impervious gloves (AS2161). CLOTHING: Chemical-resistant coveralls, splash apron and safety footwear (AS3765/2210).
Work Hygienic Practices	Do not eat, drink or smoke around product. Wash hands after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odour	Characteristic Pungent
Colour	Clear, transparent
pH	No Data Available
Vapour Pressure	Approx. 0.53kPa torr (@ 20 °C)
Relative Vapour Density	No Data Available
Boiling Point	149 - 180 °C
Melting Point	-50--60°C
Freezing Point	-50 - -60 °C
Solubility	Insoluble 25°C
Specific Gravity	<=0.87
Flash Point	30 - 46 °C Closed cup
Auto Ignition Temp	220 - 255 °C
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available

Octanol Water Coefficient	Log Pow = 4.83
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	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No Data Available
Potential for Dust Explosion	Product is a liquid.
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

General Information	On combustion, form toxic fumes including carbon monoxide. The substance decomposes slowly under the influence of air or light producing oxidation products that are more toxic or irritating than turpentine itself.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature. Flammable Liquid.
Conditions to Avoid	Avoid heat, sparks, flames, direct sunlight, moisture, freezing, static charges, mechanical shock, high temperatures and other high energy ignition sources. Also avoid enclosed spaces.
Materials to Avoid	Incompatible with strong oxidising agents, and sources of ignition. Reacts violently with oxidants, halogens, combustible substances, mineral acids. Attacks plastic and rubber.
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide.
Hazardous Polymerisation	Hazardous polymerization has not been reported. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.

11. TOXICOLOGICAL INFORMATION

General Information	Acute Oral toxicity: LD50 = 5760 mg/kg (rat); Acute Inhalation toxicity: LC50 = 12 mg/l/6h (rat); The vapour is irritating to the eyes, the skin and the respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system, bladder and kidneys, resulting in irritability, convulsions and kidney impairment. Exposure at high levels may result in tachycardia, unconsciousness, respiratory failure, death. Effects of long-term or repeated exposure Repeated or prolonged contact may cause skin sensitization. The liquid defats the skin. Aspiration hazard: May be fatal if swallowed and enters airways.
Eyelrritant	Irritating to eyes.

Ingestion	Harmful if swallowed. Harmful : may cause lung damage if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain. Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung). Ingestion can cause bladder irritation.
Inhalation	Harmful by inhalation. Material is irritant to the mucous membranes of the respiratory tract (airways). Vapours can cause headache, dizziness and nausea. The substance can be absorbed into the body via inhalation. Repeated or prolonged contact may cause asthma.
Skin/Irritant	Harmful in contact with skin. Irritating to skin. May cause sensitisation by skin contact. Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis. Can be absorbed through the skin with resultant adverse effects.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxic to aquatic life. Do not allow product to reach ground water, water course or sewage system.
Persistence/Degradability	Biological Half-Life: The mean half lives of the last phase averaged 32, 25, and 42 hours, respectively.
Mobility	No information available on mobility for this product.
Environmental Fate	Do NOT let product reach waterways, drains and sewers. Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
Bioaccumulation Potential	No information available on bioaccumulation for this product.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice. This should be done in accordance with 'The Hazardous Waste Act'. Normally suitable for incineration by an approved agent.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG

Proper Shipping Name	TURPENTINE
Class	3 Flammable Liquids
Subsidiary Risk(s)	No Data Available
EPG	15 Liquids - Flammable
UN Number	1299
Hazchem	3Y
Pack Group	III
Special Provision	No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name TURPENTINE
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
EPG 15 Liquids - Flammable
UN Number 1299
Hazchem 3Y
Pack Group III
Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name TURPENTINE
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
EPG 15 Liquids - Flammable
UN Number 1299
Hazchem 3Y
Pack Group III
Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name TURPENTINE
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
ERG 128 Flammable Liquids (Non-Polar / Water-Immiscible)
UN Number 1299
Hazchem 3Y
Pack Group III
Special Provision No Data Available

Sea Transport

IMDG

Proper Shipping Name TURPENTINE
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
UN Number 1299
Hazchem 3Y
Pack Group III
Special Provision No Data Available
EMS FE,SE
Marine Pollutant Yes

Air Transport

IATA

Proper Shipping Name TURPENTINE
Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
UN Number 1299
Hazchem No Data Available

Pack Group	III
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	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)	5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001233
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National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	KE-35026
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Not Determined
Philippines (PICCS)	Not Determined
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	GUTURP1000, GUTURP1001, GUTURP1002, GUTURP1003, GUTURP1004, GUTURP1005, GUTURP1006, GUTURP1007, GUTURP1008, GUTURP1009, GUTURP1010, GUTURP1500, GUTURP1501, GUTURP1502, GUTURP2000, GUTURP2500, GUTURP3000, GUTURP3001, GUTURP3400, GUTURP3500, GUTURP3600, GUTURP3700, GUTURP4000, GUTURP4001, GUTURP4002, GUTURP4400, GUTURP4401, GUTURP4402, GUTURP4403, GUTURP4404, GUTURP4405, GUTURP4406, GUTURP4407, GUTURP4408, GUTURP5000, GUTURP6000, GUTURP7000, GUTURP8000, GUTURP9000, GUTURP3300
Revision	2
Revision Date	01 May 2015
Reason for Issue	updated sds
Key/Legend	<p>< Less Than > Greater Than AICS Australian Inventory of Chemical Substances atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm² Square Centimetres CO₂ 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/cm³ 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 inH₂O Inch of Water K Kelvin kg Kilogram kg/m³ 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 m³ Cubic Metre mbar Millibar mg Milligram mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m³ Milligrams per Cubic Metre Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present. mm Millimetre mmH₂O 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</p>