HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

MATERIAL SAFETY DATA SHEET

GUM ROSIN

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

PRODUCT NAME	GUM ROSIN
SUPPLIER	M/s. Himalaya Terpenes Pvt. Ltd. Unit no. 201, Bldg. No. 5, Jogani Indl. Complex, V. N. Purav Marg, Sion – Chunabhatti, Mumbai – 400 022
TELEPHONE NO.	(022) 2405 6704 / 2405 6705
FAX NO.	(022) 2405 6700

2. COMPOSITION / INFORMATION IN INGREDIENTS:

CHEMICAL DECRIPTION	$C_{20}H_{30}O_2$
SYNONYM	Tricyclic Monocarboxylic Acids
CAS NO.	8050-09-7

3. PHYSICAL DATA:

APPEARANCE	:	SOLID
COLOR	:	Amber Color
ODOR	:	Rosin odoer / Odorless when cold.
BOILING POINT (100 mmHg)	:	318°C (604°F)
WATER SOLUBILITY	:	Negligible
ACID NO. (mg KOH/g)	:	164-166 (WW grade 166)
MELTING POINT (°C)	:	70°C – 80°C (WW grade 76°C)

HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

GUM ROSIN

4. FIRE AND EXPLOSION HAZARD DATA :

FLASH POINT : Above (204°C) 400°F (COC)

EXTINGUSHING MEDIA : Water Fog/Spray, Regular Foam, CO_2, Dry Chemical (Class B)
NFPA Codes: Health:0 Fire:1 Reactivity:0
(Degree of Hazard: 4=Extreme, 3=High, 2=Moderate, 1=Slight, 0=Insignificant)

SPECIAL FIRE FIGHTING PROCEDURES : As with any fire situation, full face, self-contained breathing apparatus and appropriate clothing should be worn.

UNUSUAL FIRE & EXPLOSION HAZARDS : Flammable when finely divided and suspended in air.
CAUTION: Do not use crushed gum rosin in "hot-melt" adhesive applications without special precautions.

5. HEALTH HAZARD INFORMATION:

SIGNS AND SYMPTOMS OF ACUTE AND CHRONIC EXPOSURE	:	Probably not toxic. Breathing heavy concentrations of dust should be avoided. Respirators are indicated for prolonged contact with heavy dust concentrations.
PRIMARY ROUTES OF ENTRY	:	When in dust form, by inhalation and absorption.
MEDICAL CONDITIONS AGGRAVATED	:	Irritation can occur to eyes, skin and upper respiratory system if material is in a dust form.
ROUTED OF EXPOSURE	:	Emergency and First Aid procedures.
SKIN CONTACT	:	Wash affected area with copious amount of soap and water. MOLTEN RESINS: If molten material comes in contact with the skin, cool under a running stream of water. Do not attempt to remove the resin from the skin. Removal could result in severe tissue damage. Get medical attention.
EYE CONTACT	:	Remove any contact lenses at once. Flush eye well with large quantities of water for at least 15 minutes. See a physician immediately.
INHALATION	:	If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.
ACCIDENTAL INGESTION	:	Do not induce vomiting. Call a physician. NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

GUM ROSIN

6. REACTIVITY DATA:

STABILITY	:	Stable under ordinary conditions of use and storage.
HAZARDOUS POLYMERIZATION	:	Will not occur
INCOMPATIBILITIES	:	Avoid strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Thermal degradation produces carbon oxides.

7. SAFE HANDLING AND USE:

STEPS TO TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	:	If material is not contaminated, sweep and scoop into clean containers for use. If contaminated, sweep up and scoop into containers for disposal.
WASTE HANDLING & DISPOSAL METHOD	:	Dispose of in accordance with Federal, State and local environmental regulations. This product does not constitute a hazardous waste problem.

9. SPECIAL PROTECTION AND CONTROL METHODS:

RESPIRATORY	:	Not normally needed in well ventilated area. If dust concentration is high, use NIOSH approved mask if dust is present
VENTILATION	:	General mechanical ventilation (to reduce fumes).
PROTECTIVE GLOVES	:	Neoprene or Rubber.
EYE PROTECTION	:	OSHA – approved safety glasses with side shields.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT	:	Eye bath and safety shower.

10. TRANSPORT AND SHIPPING REQUIRMENTS:

CANADIAN TDG	:	Shipping Name : CHLOROTOLUENES Hazard Class : 3, UN Number : UN2238

HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

GUM ROSIN

11. STORAGE:

HANDLING AND STORAGE PRECAUTIONS :		Store in sealed containers to preserve quality. Store in closed containers away from heat or sources of ignition and oxidizing materials. Protect against physical damage to containers. Avoid inhalation of dust and contact with skin and eyes. May form Flammable Dust / Air mixtures.
CONTROL INVENTORY	:	Use oldest material first.

12 . ENVIRONMENTAL AND REGULATORY DATA:

The following environmental and regulatory data are provided to assist users of this product in defining their regulatory environmental compliance obligations. Most resins produced from rosin are biologically inert and have a low order of toxicity. The extended use of these materials in printed inks has produced no ill effects from oral or dermal toxicity and meet FDA requirements for use in food packaging and as components of chewing gum, soft drink, citrus coatings, flavoring compounds, rubber goods and many others.

SARA TITLE III : SEC.311/312 Hazard Category :NHH, NPH

CERCLA (40 CFR 302.4 HAZARDOUS SUSBTANCE & REPORTABLE QUANTITIES)	:	This product does not contain any hazardous susbstance listed in 40 CFR 302.4
CALIFORNIA PROP.65	:	Resins based on rosin – derived resins are not listed on California's Prop. 65 toxic substance list.
RCRA INFORMATION	:	This product is not listed in federal hazardous waste regulation 40 CFR 261.33, paragraph (e) or (f), i.e., chemical products that are considered hazardous if they become wastes. It does note exhibit any of the hazardous characteristics listed in 40 CFR 261, subpart C. State or local hazardous waste regulations may apply if they are different from the federal regulation.
ODC STATUS	:	The components of this product are not found to contain any ozone depleting compounds.
TSCA STATUS	:	The components of this product are included on the EPA TSCA Chemical substance list.
DSL STATUS	:	The components of this product are included on Canada's Domestic substance list.

GUM ROSIN

CANADIA WHMIS	:	The components of this product are classified as a NON-CONTOLLED PRODUCT according to our interpretation of the amendments to the Hazardous Products Acts.

HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

FOOTNOTES :

SEC. 302 -	Threshold Planning Quantity, Extremely Hazardous Substance (EHS) (40 CFR 355 Emergency Planning and Notification regulations.) Note: The chemical is note an EMS. Therefore, there is no Threshold Planning Quantity (TPQ)
SEC. 304 -	Reportable quantity for Releases of an EMS (40 CFR 355, Appendix A) Note: This chemical is not an EMS. Therefore, there is no Reportable Quantity (RQ).
SEC. 311/312 -	40 CFR 370 Hazardous Chemical Reporting Requirements "Hazard Categories" HC – 1 Immediate (acute) health hazard HC-2 Delayed (chronic) health hazard HC-3 Fire hazard HC-4 Sudden release of pressure hazard. HC-5 Reactive hazard NHH-Not a health hazard/NPH-Not a physical hazard.
SEC. 313 -	40 CFR 372 Toxic Chemical Release Reporting Requirements.
NO. :	This component is not subject to the reporting requirements of Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements.
YES :	This component is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements. Percent composition (or estimated range) is listed above
NO. :	This product is a mixture. As such, it is not listed as a Toxic Chemical under 40 CFR 372, sect. 313 reporting requirements. Reportable constituents are listed individually where they exceed threshold concentration limits.

13. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

- Non human toxicological data : Not available
- Human toxicological data : Not available

Information toxicological effects

- Skin Corrosion/irritation: Not irritating
- Serious eye damage / irritation : Not irritating
- Respiratory or skin sensitization : Not sensitizing
- Germ cell mutagenicity : Not mutagenic
- Carcinogenicity : Not carcinogenic
- Reproductive toxicity : Not classified
- STOT – single exposure : Not classified
- STOT – repeated exposure : Not classified
- Aspiration hazardd : Not available
- Further information (epidemiology, teratogenicity, neurotoxicity synergistic products) : Not available

GUM ROSIN

14. ECOLOGICAL INFORMATION

Persistence and degradability : Biodegradation in water : readily biodegradable
Bioaccumulative potential : Aquatic BCF of rosin is 56.23 L/kgwwt (QSAR estimation)
Mobility in Soil : Not available
Results PBT & vPvB assessment: A detailed analysis of the Persistence, Bioaccumulation and toxicity has been brought together into a clear conclusion on whether rosin is not a PBT/vPvB substance.

HIMALAYA TERPENES PVT. LTD.

201/5, Jogani Industrial Estate, V.N. Purav Marg, Chunabhatti Mumbai – 400022. Tel:

+91-22-24056704/05 Fax: +91-22-24056700 Email: mum@himalayaterpene.com

15. DISPOSAL CONSIDERATIONS

Waste treatment methods:

- Waste codes / Waste designations according to EWC / AVV: 16 03 05* - organic wastes containing dangerous substances.
- Sewage disposal relevant information : do not wash away into sewer
- Additional information: Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier. Ultimate disposal of the chemical must consider: the material's impact on air quality, potential migration in soil or water, effects on animal, aquatic, and plant life, and conformance with environmental and public helath regulations

16. OTHER INFORMATION:

DISCLAIMER	:	The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of M/s. Himalaya Terpenes Pvt. Ltd. knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.