



Safety Data Sheet

VERSION 1, revision date: 5/29/2015

PRODUCT : GUM ROSIN

In Compliance with OSHA Hazard Communication Standard 29 CFR 1910.1200

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name:	GUM ROSIN (ALL GRADES)
Chemical Name:	GUM ROSIN
CAS Number:	8050-09-7
EINECS Number:	232-475-7
Relevant Identified Uses:	Adhesives, Printing Ink, etc.
Synonyms:	COLOPHONY, TRICYCLIC MONOCARBOXYLIC ACIDS
Uses Advised Against:	None known
Company name:	PDM, Inc.
Address:	3411 Silverside Road, 104 Webster Bldg. Wilmington, Delaware 19803, U.S.A.
Phone Number:	(302) 478-0768
Fax Number:	(302) 478-0299
CHEMTREC 24-Hour Emergency Phone Number:	Toll-Free (800) 494-9300; Collect (202) 483-7616
E-mail and Website:	office@pdmchemicals.com; www.pdmchemicals.com

Gum Rosin
720091

2. HAZARDS IDENTIFICATION

SIGNAL WORD:

WARNING



GHS07



GHS08

Classification of the substance or mixture:

ACUTE DERMAL TOXICITY, CATEGORY 5
 ACUTE INHALATION (DUST) TOXICITY, CATEGORY 4
 SKIN SENSITIZER, CATEGORY 1
 RESPIRATORY SENSITIZER, CATEGORY 1
 SKIN IRRITANT, CATEGORY 3



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EYE IRRITANT, CATEGORY 2B

HAZARDOUS TO THE AQUATIC ENVIRONMENT, LONG-TERM (CHRONIC), CATEGORY 4

HAZARD STATEMENTS

PHYSICAL HAZARDS:

NONE

HEALTH HAZARDS:

H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled

ENVIRONMENTAL HAZARDS:

H413 - May cause long lasting harmful effects to aquatic life

PRECAUTIONARY STATEMENTS

PREVENTION:

P210 - Keep away from heat / sparks / open flames / hot surfaces.
No smoking
P233 - Keep container tightly closed
P261 - Avoid breathing dust / fume / gas / mist / vapors / spray
P262 - Do not get in eyes, on skin, or on clothing
P264 - Wash hands thoroughly after handling
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
P280 - Wear protective gloves / protective clothing / eye protection / face protection

RESPONSE:

P301 + P310 - If swallowed: immediately call a poison center or doctor / physician
P302 + P352 - If on skin: wash with plenty of soap and water
P330 - RINSE MOUTH
P331 - DO NOT INDUCE VOMITING
P333 + P313 - If skin irritation or rash occurs: get medical advice / attention
P362 - Take off contaminated clothing and wash before reuse

STORAGE:

P403 + P233 + P235 - Store in a well-ventilated place. Keep container tightly closed. Keep cool.

DISPOSAL:

P501 - Dispose of contents / container to approved disposal facility or site

OTHER INFORMATION

SOLID RESIN HAZARDS:

No physical / chemical, environmental or human hazards are reported or known. OSHA has listed gum rosin as a "sensitizer" with the



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MOLTEN RESIN HAZARDS:

warning statement: "reduce exposure to as low as possible."
However, there is no set Threshold Limit Value (TLV).

Vapors emitted when the resin is heated can cause respiratory problems. Fumes from hot resin, at high temperatures, can have an irritating effect on eyes.

Refer to Section 15 for other regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Molecular Formula: $C_{20}H_{30}O_2$

EC/UPAC NAME	CAS	EINECS	WEIGHT %	SYMBOL	R PHASES	S PHASES
Gum Rosin	8050-09-7	232-475-7	>85%	Xi	See Section 15	See Section 15
Un-saponifiable Matter	N/A	N/A	<15%	N/A	See Section 15	See Section 15

4. FIRST AID MEASURES

AFTER INHALATION:

Supply fresh air. Vapors may cause slight irritation. If symptoms are experienced, get medical attention. In case of unconsciousness, place patient in stable side position for transportation.

AFTER INGESTION:

DO NOT INDUCE VOMITING.
Immediately call a doctor / physician.

AFTER SKIN CONTACT:

Immediately rinse with plenty of water. Wash the product powder away with soap. For contact with melted rosin, cool the affected area immediately, do not try to remove the rosin plaques from the skin. Get medical attention if irritation or skin rash occurs. Remove contaminated clothing and footwear. Wash clothing before use. Clean footwear thoroughly before use.



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AFTER EYE CONTACT:

Immediately rinse with plenty of water. Remove contact lenses if present and easy to do. Hold eyelids apart and flush eyes with plenty of cool low-pressure water for at least 15 minutes. Get immediate medical attention if discomfort persists.

5. FIRE FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:**COMBUSTIBLE (AVOID GENERATION OF DUST)****FLASH POINT:****>205°C (>400°F)****EXTINGUISHING MEDIA:**

- **SUITABLE:**

WATER FOG / SPRAY, DRY CHEMICAL (CLASS B), REGULAR FOAM, CO₂

- **UNSUITABLE:**

UNKNOWN**HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:**

Thermal decomposition may generate carbon monoxide, carbon dioxide and other unidentified organic compounds.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS:

Do not breathe material-related dust. Avoid generating dust when handling this product. Wear personal protective equipment. Evacuate unprotected persons to safe areas. Provide adequate ventilation. Remove all sources of ignition.

MEASURES FOR ENVIRONMENTAL PROTECTION:

This material is not biodegradable. Avoid allowing the product or by-products to reach soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (soil, waterways, drains or sewers).

MEASURES FOR CLEANING / COLLECTING:

- **SOLID:**

Collect solid materials in appropriate container and



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label for proper disposal. In situations where the material remains uncontaminated, the material may be collected for use.

- LIQUID (MOLTEN):

Allow liquid material to cool then collect cooled solids. Place materials in an appropriate container and label for proper disposal or use, depending on contamination of material.

7. HANDLING AND STORAGE

HANDLING:

Wear personal protective equipment. Provide adequate ventilation. Solid material is non-toxic. Vapors from liquid material may cause respiratory irritation. Keep product dust / fines away from heat, sparks, open flames and hot surfaces.

STORAGE:

Requirements for storage areas and containers: Store in a cool well-ventilated place, away from heat sources.

RECOMMENDED AND UNSUITABLE MATERIALS FOR STORAGE:

- SUITABLE: Stainless steel, galvanized, aluminum drums; or bags composed of approved materials.
- UNSUITABLE: None known

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS: NOT AVAILABLE

BIOLOGICAL EXPOSURE LIMITS: NOT AVAILABLE

DNEL: NOT AVAILABLE

PNEC: NOT AVAILABLE

ENGINEERING MEASURES: Provide local exhaust or general room ventilation to minimize exposure to vapors. Emergency eye wash fountains and safety showers should be available in



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the immediate vicinity of any potential exposure.

PERSONAL PROTECTION:

EYES / FACE PROTECTION:

Safety goggles (standard EN 166).

HAND PROTECTION:

Protective gloves resistant to chemicals (standard EN 374-1). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

BODY PROTECTION:

Protective work clothing

RESPIRATORY PROTECTION:

Use suitable respiratory protective device in case of insufficient ventilation to reduce exposure to vapors and/or material-related dust.

GENERAL PROTECTIVE AND HYGIENIC MEASURES:

The usual precautionary measures are to be adhered to when handling chemicals. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Solid at 20°C
ODOR:	Slight pine / resin aroma
ODOR THRESHOLD:	Not available
pH:	Not applicable
ACID NUMBER:	147 – 167 (mg KOH/g)
MELTING POINT:	68 - 78°C (154.4 – 172.4°F)
FLASH POINT:	>205°C (>400°F)
INITIAL BOILING POINT / BOILING RANGE:	Not available
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Combustible (Dust)
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	Not available
VAPOR PRESSURE (@ 317°C):	100 mmHg
VAPOR DENSITY:	4.7 (air = 1)
SPECIFIC GRAVITY (H ₂ O = 1):	1.06 - 1.09
PARTITION COEFFICIENT	Log Pow: 1.9 - 7.7



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N-OCTANOL / WATER (LOG VALUE):

WATER SOLUBILITY:	Insoluble
REFRACTION INDEX:	1.54 at 20°C
SELF-IGNITION TEMPERATURE:	Not available
DECOMPOSITION TEMPERATURE:	Not available
VISCOSITY:	Not available
EXPLOSIVE PROPERTIES:	Not available
OXIDIZING PROPERTIES:	Not available
DISSOCIATION CONSTANT:	Not available
STABILITY IN ORGANIC SOLVENTS AND IDENTITY OF RELEVANT DEGRADATION PRODUCTS:	Not available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	No decomposition if used according to specifications. Product is stable under normal conditions.
REACTIVITY:	Does not present reactivity in contact with air or water.
CONDITIONS TO AVOID:	Keep away from heat and sources of ignition. Avoid material dust dispersion in air.
MATERIALS TO AVOID:	Avoid contact with strong acids, alkalis, oxidizing agents, and organic and inorganic peroxides.
HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:	Thermal decomposition may generate carbon monoxide, carbon dioxide and other unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

HUMAN HEALTH HAZARD ASSESSMENT

Solid resin at normal temperatures presents no toxicological danger. No values of long term or chronic toxicity are available. Inhalation studies with rats submitted to decomposition fumes of this kind indicate low toxicity. At normal concentration of 1.50-2.00 mg/l of fumes, no deaths occurred after a six-hour exposure period.

12. ECOLOGICAL INFORMATION



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ECOTOXICITY:

ACUTE TOXICITY (LC50): FISH (Brachydanio Rerio) 150 mg/L (96 h)

ACUTE TOXICITY (EC50): DAPHNIA Magna 238 mg/L (48 h)

ACUTE TOXICITY (EC50): ALGAE (Selenastrum capricornutum) 185 mg/L (72 h)

BIODEGRADABILITY:

32% biodegradable after 28 days

BIOACCUMULATIVE POTENTIAL:

NOT AVAILABLE

MOBILITY IN SOIL:

NOT AVAILABLE

13. CONSIDERATIONS ON WASTE TREATMENT AND DISPOSAL

PRODUCT:

Dispose of in accordance with Federal, State and Local environmental regulations. This product does not constitute a hazardous waste problem. Avoid inhalation of material-related dust and contact with skin & eyes. May form flammable dust / air mixtures.

UNCLEANSSED PACKAGING:

Disposal must be made according to local and national regulations.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS 65: NON-REGULATED CHEMICALS, NOI. (NON-HAZARDOUS)

**NFPA CODES:**

HEALTH - 1, FIRE - 1, REACTIVITY - 0

Gum Rosin	
HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	0

HMIS CODES

15. REGULATORY INFORMATION

This product is in compliance with inventory listing requirements of the U. S. Toxic Substance Control Act (TSCA) - Chemical Substance Inventory, EINECS - Europe, DSL - Canada, ENCS - Japan, AICS - Australia, IECS - China, PICCS - Philippines, and ECL - Korea.



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Classification according to Directive 67/548/EEC – Annex I and Regulation (EC) N°1272/2008 – Annex VI



Xi - IRRITANT



Xn - HARMFUL



N - DANGEROUS FOR THE ENVIRONMENT

RISK PHRASES:

- R 20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN, AND IF SWALLOWED.
- R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM, AND SKIN.
- R 42/43 MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.
- R 52/53 HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
- R 65 HARMFUL; MAY CAUSE LUNG DAMAGE IF SWALLOWED.

SAFETY PHRASES:

- S 22 DO NOT BREATHE DUST.
- S24/25 AVOID CONTACT WITH SKIN AND EYES.
- S 36/37/39 WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.
- S 46 IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS SDS OR LABEL.
- S 61 AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS / SAFETY DATA SHEETS.
- S 62 IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS SDS OR LABEL.

ADDITIONAL REGULATORY INFORMATION

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 & 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 & meet FDA requirements for use in food packaging & as components of chewing gum, soft drinks, citrus coatings, flavoring compounds, rubber goods & many others.

SARA TITLE III

- SECTION 302¹, EHS TPQ (LBS.): N/A²
- SECTION 304³, EHS RQ (LBS.): N/A⁴



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SECTION 311 / 312⁵, HAZARD CATEGORY:	NHH, NPH
SECTION 313, TOXIC CHEMICAL (YES, NO):	NO
CERCLA (40 CFR 302.4 HAZARDOUS SUBSTANCE & REPORTABLE QUANTITIES):	Gum Rosin is NOT contain any hazardous substances 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 not 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. This product is NOT biodegradable.
ODC STATUS:	Gum Rosin is NOT found to contain any ozone depleting compounds since rosin by definition is non-volatile resinous.
TSCA STATUS:	Gum Rosin is included on the EPA TSCA Chemical Substance Inventory.
DSL STATUS:	Gum Rosin is included on Canada's Domestic Substance List.
CANADIAN WHMIS:	Gum Rosin is classified as a NON-CONTROLLED PRODUCT according to our interpretation of the amendments to the Hazardous Products Acts.

FOOTNOTES:

1) SECTION 302 - Threshold Planning Quantity, Extremely Hazardous Substance (EHS). (40 CFR 355 Emergency Planning and Notification regulations). 2) N/A: This chemical is not an EMS. Therefore, there is no Threshold Planning Quantity (TPQ). 3) SECTION 304 - Reportable Quantity for Releases of an EMS (40 CFR 355, Appendix A). 4) N/A: This chemical is not an EMS. Therefore, there is no Reportable Quantity (RQ). 5) SECTION 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.

16. OTHER INFORMATION

PDM, Inc. believes that such information is accurate and reliable as of the date of this SDS, but no representation, guarantee or warranty, expressed or implied, is made to the accuracy, or completeness of the information. PDM, Inc. urges users receiving this information to make their own determination as to the