

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006

Tall Oil Rosin (TOR)



Version number: 9
Issued: 2022-02-01
Replaces SDS: 2021-03-15

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Tall Oil Rosin (TOR)

CAS number

8050-09-7

EC number

232-475-7

REACH registration number

01-2119480418-32

Index No.

650-015-00-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Manufacture rosin
Rubber production
Binders and release agents
Coatings
Production of paper and cardboard

1.3. Details of the supplier of the safety data sheet

Supplier

SunPine AB

Street address

Box 76

941 22 Piteå

Sweden

Telephone

0911-23 28 00

Email

sds@sunpine.se

Web site

www.sunpine.se

1.4. Emergency telephone number

NHS 111

Available outside office hours

Yes

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin sensitisation, hazard category 1

Hazard statements

H317

Description

For the complete meaning of H phrases mentioned in this section, see section 16.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Avoid breathing smoke/fog/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water/soap.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container to approved waste facility.

2.3. Other hazards

The product does not meet the PBT and vPvB criteria of REACH regulation, Annex XIII.

The product does not contain any known or suspected endocrine disruptors.

Contact with hot product can cause burns to skin and eyes.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Rosin	8050-09-7 232-475-7 01-2119480418-32 650-015-00-7	100%	Skin Sens. 1	H317 - -	-

Product based on

The product is defined as a UVCB substance and consists mainly of resin acids and modified resin acids, such as dimers and decarboxylated resin acids.

Substance additional information

For the complete meaning of H phrases mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

In uncertainty or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention in case of persisting adverse health effects.

Skin contact

In case of contact with molten product: Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before re-use.

In case of contact with hot product: Cool molten material attached to the skin immediately with water. Seek a doctor to remove the attached product and to treat the burn.

Eye contact

In contact with hardened product: Rinse gently with tempered water for 10 minutes. Keep eyelids wide apart. Remove any contact lenses if possible without difficulty. Continue rinsing. Get specialist medical attention if there are any persisting symptoms.

In case of contact with molten product: Immediately flush eyes for at least 15 minutes. Get medical attention.

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Ingestion

Do NOT induce vomiting. Wash out mouth carefully with plenty of water. Seek medical attention immediately if vomiting or serious coughing occurs, or if more than an insignificant amount has been swallowed.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

No information available.

Skin contact

May cause allergic skin reaction. Contact with hot product can cause burns.

Eye contact

Irritation to eyes and mucous membranes. Can cause stinging, extreme tearing, redness, swelling and blurred vision. Contact with hot product can cause eye damages.

Ingestion

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Sand (in case of smaller fire outbreaks).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Wear full protective clothing and breathing apparatus for fire fighting.
Wear full protective clothing.

Other

Remove all sources of ignition. Containers in the vicinity of fire should be moved immediately or cooled with water. Ensure the water does not come into contact with the seat of the fire. The product is not considered flammable but may burn at high temperatures.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective gloves and other suitable personal protective equipment.

Hot/molten product: Avoid contact with hot materials. Ensure good ventilation. Do not inhale fumes. In case of insufficient ventilation wear suitable respiratory equipment.

Hardened product: Ensure good ventilation. Avoid breathing dust. In case of insufficient ventilation wear suitable respiratory equipment.

6.2. Environmental precautions

Stop leaks only if no risk is involved. Prevent discharges to watercourses, waste water or the ground. In the event of major spillages, contact the emergency services. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Hot/molten product: The product is immiscible with water and spreads on the surface of water. Absorb in inert material (vermiculite, dry sand or soil) and collect. Where possible, allow the product to harden naturally. Collect in suitable labelled waste containers. Clean the spill area with large amounts of water and cleaning agent.

Hardened product: Collect in a suitable container that is approved for this purpose. Minimize dry sweeping in order to avoid the occurrence of dust clouds.

6.4. Reference to other sections

For personal protection see section 8 and for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Avoid contact with skin and eyes. Avoid inhalation of vapors, mist, dust and fumes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautions against static electricity. Remove and wash contaminated clothing before re-use. Ensure good ventilation. Ensure that eyewash stations and safety showers are close to the workstation location. The product can self-ignite in porous materials such as insulation material and used rags.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Take precautions against static electricity.

Hot/molten product: Store at 185 - 205°C.

Hardened product: Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

See section 1.2.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m ³	Short-term exposure limit ppm / mg/m ³	Source	Remark	Year
Rosin	8050-09-7 232-475-7	- 0.05	- 0.15	EH40/2005 Workplace exposure limits	Sen - Capable of causing occupational asthma. Refers to rosin-based solder flux fume.	2018

DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
Rosin (8050-09-7/232-475-7)	DNEL	Chronic (long term) Inhalation	10 mg/m ³	Workers	Systemic
Rosin (8050-09-7/232-475-7)	DNEL	Chronic (long term) Dermal	1.065 mg/kg bw/day	Consumer	Systemic
Rosin (8050-09-7/232-475-7)	DNEL	Chronic (long term) Oral	1.065 mg/kg bw/day	Consumer	Systemic
Rosin (8050-09-7/232-475-7)	DNEL	Chronic (long term) Dermal	2.131 mg/kg bw/day	Workers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
Rosin (8050-09-7/232-475-7)	PNEC	Freshwater	0.002 mg/l
Rosin (8050-09-7/232-475-7)	PNEC	Intermittent releases	0.016 mg/l
Rosin (8050-09-7/232-475-7)	PNEC	Sewage Treatment Plant	1000 mg/l
Rosin (8050-09-7/232-475-7)	PNEC	Sediment (freshwater)	0.007 mg/kg dwt
Rosin (8050-09-7/232-475-7)	PNEC	Sediment (marine water)	0.001 mg/kg dwt

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8.2. Exposure controls

Appropriate engineering controls

Keep exposure at all times to a minimum through adequate ventilation. Good general ventilation (normally, 10 air changes per hour) should be used. Ensure that eyewash station are close to the workplace.

Eye / face protection

When working with hot product or industrial spraying: Use comprehensive protective visor.
When working with non-hardened product: If splashes are likely to occur, wear: Safety glasses with side-shields conforming to EN166.

Hand protection

When handling a hot product: Wear heat-resistant protective gloves. Leather gloves.
When dealing with non-hardened, or hardened product: Use chemical resistant gloves that corresponds to EN 374.
Recommended material: Polyvinyl alcohol (PVA) or Nitrile rubber
Break through time of the glove material: > 4 h

Other skin protection

Wear protective clothing if there is a risk of direct contact. Impenetrable protective clothing must be used for industrial spraying.

Respiratory protection

Respiratory protection should be used to prevent inhalation of mist/vapours/fumes (eg. for cleaning large spills or upon entry into tanks, vessels or other confined spaces). In case of insufficient ventilation or risk of inhalation of vapors: Respirator with a gas filter A. Particle filter P3 should be used if there is a risk of inhalation of smoke, mist or dust. Combination filter A/P3 can be used in case of uncertainty or at risk of inhaling both vapors and smoke, mist or dust.

Environmental exposure controls

Collect spillage. Prevent spills from entering drains or sewers and contaminating soil and vegetation. Notify authorities if product enters sewers or public waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Fluid at temperatures > 100°C. Hardened product is solid and brittle at ambient temperature.

Colour

Yellow/amber.

Odour

Characteristic.

Melting point / freezing point

100 - 150 °C

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Boiling point or initial boiling point and boiling range

372 - 430 °C

Method

20190513, internal measurement, ASTM D6352.

Flammability

No information available.

Lower and upper explosion limit

No information available.

Flash point

240 °C

Auto-ignition temperature

> 350 °C

Method

External analysis from 2018, Saybolt, ASTM E 659.

Decomposition temperature

No data available

pH

No data available

Kinematic viscosity

9.6 mm²/s

Method

At 190°C, internal measurement, 20170407, ASTM D445.

Solubility

Insoluble in water.

Partition coefficient n-octanol/water

No information available.

Vapour pressure

No information available.

Density and/or relative density

956 kg/m³ at 180°C and 949 kg/m³ at 194°C, according to the mass flow meter of the process.

Relative density: 1.07-1.09 g/m³ (15°C).

Relative vapour density

No information available.

Particle characteristics

No information available.

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9.2. Other information

Softening point: $72 \pm 10^\circ\text{C}$ made with ASTM D 6090, internal measurement.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal usage and storage conditions.

10.2. Chemical stability

Stable under normal usage and storage conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No harmful degradation products during normal handling.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
Rosin 8050-09-7 / 232-475-7	LD50	> 2000 mg/kg	Oral	-	Rat	OECD 423	Female
Rosin 8050-09-7 / 232-475-7	LD50	> 2000 mg/kg bw	Dermal	24h	Rat	OECD 402	Male/Female

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

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Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Skin sensitisation, hazard category 1 - May cause allergic skin reaction.

Tests carried out on non-oxidised rosin (CAS no. 8050-09-7), indicates however no skin sensitisation effects (in accordance with OECD 406 and 429).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation to eyes and mucous membranes. Can cause stinging, extreme tearing, redness, swelling and blurred vision. Contact with hot product can cause burns to skin and eyes. Contact with skin can cause allergic reactions such as redness, swelling, blistering and itching.

11.2. Information on other hazards

Endocrine disrupting properties

Not relevant.

Other information

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

The product is not classified as dangerous for the environment.

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Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Rosin 8050-09-7 / 232-475-7	LC50	1.7 mg/l	96h	Pimephales promelas (fathead minnow)	OECD 203

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Rosin 8050-09-7 / 232-475-7	ErC50	16.6 mg/l	72h	Pseudokirchneriella subcapitata (green algae)	OECD 201

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline
Rosin 8050-09-7 / 232-475-7	EC50	1.6 mg/l	48h	Daphnia magna (Water flea)	OECD 202

12.2. Persistence and degradability

The product is easily biodegradable.

Tests carried out according to OECD 301B show that 80 % of the substance is degraded after 28 days.

12.3. Bioaccumulative potential

The product has no known bioaccumulative potential.

12.4. Mobility in soil

Mobility

The estimated log Koc values for the substances in rosin vary from 0.8759 till 5.37 (KOCWIN v2.00).

12.5. Results of PBT and vPvB assessment

This substance does not fulfill the PBT/vPvB- criteria according to the REACH-regulations, Annex XIII.

12.6. Endocrine disrupting properties

Not relevant.

12.7. Other adverse effects

None known.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of any product, residue or packing material according to national and local regulations. Avoid discharges into drains, onto the ground and in aquatic environments. Product residues, waste etc. are hazardous waste.

Waste code	Description
08 04 17*	Rosin oil

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

Other

The waste code is a recommendation. Appropriate classification of waste is the user's responsibility.

SECTION 14: Transport information

14.1. UN number

3257

14.2. UN proper shipping name

LIQUID, ELEVATED TEMPERATURE, N.O.S. (rosin)

IMDG proper shipping name

LIQUID, ELEVATED TEMPERATURE, N.O.S. (rosin)

14.3. Transport hazard class(es)

Label

9

ADR / RID Class

9

ADR / RID Classification code

M9

ADR / RID hazard identification number

99

IMDG Class

9

IATA Class

9

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ADN Class

9

ADN Class Code

M9

14.4. Packing group

III

14.5. Environmental hazards

No.

IMDG Marine Pollutant

No.

14.6. Special precautions for user

Tunnel restriction code D

IMDG EmS: F-A, S-P

14.7. Maritime transport in bulk according to IMO instruments

Product name: Rosin

Pollutant type: Y

Ship type: 2

Other

Hardened product: Not classified as dangerous goods according to transport regulations.

Hot/molten product: Dangerous goods.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP).

Directive 2008/98/EC of the European Parliament and of the Council on waste.

Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National regulations

Local laws and regulations should be carefully observed.

The Control of Substances Hazardous to Health Regulations 2002.

EH40/2005 Workplace exposure limits (fourth ed., 2020).

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15.2. Chemical safety assessment

A chemical safety assessment has been carried out. Relevant exposure scenarios are attached as an annex to this safety data sheet.

SECTION 16: Other information

Changes to previous revision

Changes are made in the following sections: 1-2, 4, 9, 11-12, 14, 15-16.

Abbreviations

vPvB: very Persistent and very Bioaccumulative.

PBT: Persistent, Bioaccumulative and Toxic.

EC50: The concentration of a substance that affects 50 % of a population over a given period of time.

ErC50: The concentration of a test substance which results in 50 % reduction in growth rate relative to the control group within 72 hours exposure.

LD50: Lethal dose for 50 % of the test population (lethal median dose).

LC50: Deadly concentration for 50 % of a test population.

UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.

References to key literature and data sources

C&L Inventory database (ECHA).

REACH registration dossier.

Phrase meaning

Skin Sens. 1 - Skin sensitisation, hazard category 1

H317 May cause an allergic skin reaction.

Other

Additional information

ES 1: Manufacture rosin

ES 2: Industrial use - Rubber production

ES 3: Industrial use - Binders and release agents

ES 4: Industrial use - Coatings

ES 5: Industrial use - Production of paper and cardboard

Manufacturer's notes

This product information has been compiled by SunPine AB in Piteå using the data available to the company at the time stated. The information must be considered as guidance for purchasers of goods from SunPine AB, and is intended to be used for health, safety and the environment purposes. The information must not be considered to be a specification or a guarantee of any specific property of the product.