

# SAFETY DATA SHEET

In accordance with Regulation (EC) no. 1907/2006



SUNPINE

## Tall oil rosin (TOR)

Version: 4.0/Eng

Revision date: 16/01/2019

Supersedes: 10/10/2017

### 1 NAME OF SUBSTANCE/MIXTURE AND FIRM/COMPANY

#### 1.1 Product designation

Trade name: **Tall oil rosin (TOR)**  
Name of substance: Rosin  
CAS no.: 8050-09-7  
EC no.: 232-475-7  
Index no.: 650-015-00-7  
REACH registration number: 01-2119480418-32

#### 1.2 Relevant identified uses of the substance or mixture and non-recommended uses

Identified uses: *Manufacturing rosin*  
*Rubber production*  
*Binders and release agents*  
*Coatings*  
*Production of paper and cardboard*

#### 1.3 Further details about safety data sheet provider

Name: SunPine AB  
Address: Box 76  
941 22 Piteå  
Sweden  
Telephone number: 0911-23 28 00  
E-mail address of publisher responsible for safety data sheet: sds@sunpine.se

#### 1.4 Telephone number in emergency situations

Emergency telephone number in Sweden: 112  
Telephone number of the Poisons Information Centre: 010-456 67 00  
On duty off hours: Yes

### 2 HAZARDOUS PROPERTIES

#### 2.1 Classification of substance or mixture

**Classified in accordance with Regulation (EC) no. 1272/2008:**

Skin sensitiser, Category 1: H317

See section 16 for full description of hazard classes and hazard statements.

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### 2.2 Labelling details

#### Labelling in accordance with Regulation (EC) no. 1272/2008

Hazard pictogram:



Signal word: Warning

Hazard statements:

H317: May cause an allergic skin reaction

Precautionary statements:

P261: Avoid breathing fumes/mist/vapours/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: Seek medical advice/attention.

P363: Wash contaminated clothing before reuse.

P501: Dispose of contents/container to approved disposal site.

Contains: Rosin

### 2.3 Other hazards

The product does not fulfil the PBT and vPvB criteria in accordance with Annex XIII to REACH.

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

## 3 COMPOSITION/INFORMATION ABOUT COMPONENTS

### 3.1 Substances

#### Classification of components in accordance with the CLP Regulation (1272/2008/EC):

Hazardous substance	Conc. (w/w %)	CAS No/ EC No/ Index No	Hazard class and category codes	Hazard statements
Rosin*	100	8050-09-7/ 232-475-7/ 650-015-00-7	Skin Sens. 1	H317

\*Note: The product is defined as a UVCB substance<sup>1</sup> and is composed primarily of resin acids and modified resin acids such as dimers and decarboxylated resin acids.

<sup>1</sup> Substances with unknown or varying compositions, complex reaction products or biological material.

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See section 16 for full wording of hazard phrases.

### 4 FIRST-AID MEASURES

#### 4.1 Description of First-aid measures

##### If inhalation occurs:

Move exposed person to fresh air and keep person at rest to facilitate breathing. Seek medical attention in case of persisting adverse health effects.

##### If skin contact occurs:

Contact with hardened/molten product: Remove contaminated clothing and shoes and dispose of them safely. Wash contaminated skin with plenty of water and soap.

Contact with hot product: Cool the melted material stuck to skin as quickly as possible with water. Seek medical attention to remove solidified product and to treat burns.

##### If eye contact occurs:

Contact with hardened product: Gently flush eyes with tempered water for 10 minutes. Lift the upper and lower eyelids. Check for and remove any contact lenses if this is not difficult. Continue to rinse. Get specialist medical attention if there are any persisting symptoms.

Contact with melted/hot product: Immediately rinse the eyes for at least 15 minutes. Seek medical attention.

##### If ingestion occurs:

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 The most important symptoms and effects, both acute and delayed

##### Inhalation:

No information.

##### Skin contact:

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

##### Contact with eyes:

Irritation of the 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.

#### 4.3 Indication of any immediate medical attention and special treatment required

Treat symptomatically. Seek medical attention if unsure or in case of persisting adverse health effects. Never give anything by mouth to an unconscious person.

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### 5 FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable media:

Powder, foam, CO<sub>2</sub> and water spray. Sand (in case of smaller fire outbreaks).

Unsuitable media:

Do not use powerful water jet as this can cause the fire to spread.

#### 5.2 Specific hazards that the substance or mixture can cause

No information available.

#### 5.3 Advice for firefighters

Wear full-body protective clothing and breathing masks when fighting fires. Wear full-body protective clothing.

*Other*

Eliminate all fire/ignition sources. Containers in the vicinity of fires 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.

### 6 MEASURES IN THE EVENT OF UNINTENTIONAL EMISSIONS

#### 6.1 Personal precautions, protective equipment and emergency measures

Use protective gloves and other necessary protective equipment.

Hot/molten product: Avoid contact with hot materials. Ensure good ventilation and avoid inhalation of fumes. Use suitable respiratory protection if ventilation is poor.

Hardened product: Ensure good ventilation and avoid inhalation of dust. Use suitable respiratory protection if ventilation is poor.

#### 6.2 Environmental precautions

Prevent leakage if safe to do so. Prevent emissions from coming into contact with waterways, sewage and soil. Contact the emergency services in the case of larger spills. Local authorities must be informed if significant spills cannot be contained.

#### 6.3 Methods and materials for containment and cleaning up

Molten product: The product cannot be mixed with water and is dispersed on water surfaces. Absorb spills with a suitable inert absorbent (e.g. sand, active clay, multisorb). 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 suitable labelled waste containers. Minimize dry sweeping in order to avoid the occurrence of dust clouds.

#### 6.4 Reference to other sections

See section 8 for information on personal protection equipment and section 13 for disposal information.

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### 7 HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Do not get on skin or in the eyes. Keep away from sources of heat, sparks, open flames or hot surfaces. Take precautionary measures against electrostatic discharges. Do not breathe vapours, mist, fumes or dust. Remove and wash contaminated clothing before reuse. Ensure adequate ventilation. Smoking is prohibited. Ensure that there are eye wash and emergency shower facilities in close proximity to the workplace.

#### 7.2 Conditions for safe handling, including any incompatibilities

Store away from heat and ignition sources. Take precautionary measures against electrostatic discharges.

Molten product: Store at 185 - 205 °C.

Hardened product: Store in a cool, dry and well-ventilated place.

#### 7.3 Specific end use(s)

Not available.

### 8 LIMITATION OF EXPOSURE/PERSONAL PROTECTION

#### 8.1 Control parameters

Exposure limits:

Derived no effect level (DNEL) - Employer

Exposure pattern	Exposure route	Descriptors	DNEL	Most sensitive endpoint
Acute systemic effects	No risk identified			
Acute local effects	No risk identified			
Long-term systemic effects	Skin	DNEL	17 mg/kg/d	Repeated dose toxicity
	Inhalation	DNEL	117 mg/m <sup>3</sup>	Repeated dose toxicity
Long-term local effects	No risk identified			

Hygienic limit values:

There are no hygienic limit values for rosin in Sweden.

#### 8.2 Limitation of exposure

Technical measures:

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 there are eye wash facilities in close proximity to the workplace.

Eye/face protection:

When working with hot product or industrial spraying: Use comprehensive protective visor.

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When working with molten product: Wear safety glasses with side protection in case of splashing.

### Dermal protection/protective gloves:

When handling hot product: Use heat-resistant protective clothes and gloves, for instance leather gloves.

When handling molten or hardened product: Use protective gloves if there is a risk of direct contact or splashes. Use chemical-resistant protective gloves that comply with EN374. It is recommended to use a glove material made of nitrile rubber or polyvinyl alcohol (PVA) with a breakthrough time greater than four hours.

Use protective clothing if there is a risk of direct contact.

Impenetrable protective clothing must be used for industrial spraying.

### Respiratory protection:

Use respiratory protection if there is a risk of inhaling vapours, fumes, mist or dust (e.g. when cleaning, working in enclosed spaces and tanks).

Gas filter type A should be used if there is a risk of inhalation of vapors. 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.

### Limitation of environmental exposure:

Collect spillage. Prevent dispersal of spilled materials to waterways, drains and sewers and pollution of soil and vegetation.

## 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:	Amber colour, yellow	
Odour:	Characteristic	
Odour threshold:	Not applicable	
pH:	Not applicable	
Melting point/freezing point:	100 to 150 °C	Not specified
Initial boiling point and boiling range:	Not applicable	
Flash point:	220°C	Not specified
Evaporation rate:	Not applicable	
Flammability:	Not applicable	
Lower and upper explosive (flammable) limits:	Not applicable	
Vapour pressure:	Not applicable	
Vapour density:	Not applicable	
Relative density:	1.07-1.09 g/m <sup>3</sup> (15 °C)	Not specified
Solubility in water:	Insoluble	
Partition coefficient: n-octanol/water:	Not applicable	
Auto-ignition temperature:	380 °C	Not specified
Decomposition temperature:	Not applicable	

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Viscosity:	Not applicable
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising

### 9.2 Other information

No data available

## 10 STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under normal conditions regards use and storage.

### 10.2 Chemical stability

Stable under normal conditions regards use and storage.

### 10.3 Possibility of hazardous reactions

Not applicable.

### 10.4 Conditions to avoid

Avoid overheating, heat and ignition sources.

### 10.5 Incompatible materials

Not applicable.

### 10.6 Hazardous decomposition products

No known hazardous decomposition products under normal handling.

## 11 TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### a) Acute toxicity

TOR is not classified for acute toxicity.

LD50 Oral: > 2,000 mg/kg (rat) (OECD 423)

LD50 Dermal: >2,000 mg/kg bw (rat) (OECD 402)

#### b) Skin corrosion/irritation

TOR is not considered to be corrosive/irritating to skin according to the OECD 404 method.

#### c) Serious eye damage/irritation

TOR is not considered to cause eye irritation according to the OECD 405 method.

#### d) Respiratory - skin sensitisation

TOR has a harmonised classification of skin sensitisation, category 1 in accordance with Regulation (EC) no. 1272/2008. 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).

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e) Germ cell mutagenicity

TOR is not considered to be mutagenic according to the OECD 471 method.

f) Carcinogenicity

TOR is not considered to cause cancer.

g) Reproductive toxicity

TOR is not classified for reproductive toxicity.

h) Specific target organ toxicity (single exposure)

TOR is not considered to cause organ damage through single exposures.

i) Specific target organ toxicity (repeated exposure)

TOR is not considered to cause organ damage through long-term or repeated exposures.

j) Aspiration hazard

TOR is assessed not to be fatal if it is swallowed and enters airways.

## 12 ECOLOGICAL INFORMATION

### 12.1 Toxicity

TOR is not classified as toxic to aquatic life.

Acute toxicity for fish:

LC50, 96h, *P. promelas* (OECD 203): 1.7 mg/L

NOAEC: 0.625 mg/L

Acute toxicity for shellfish:

EC50, 48h, *D. magna* (OECD 202): 1.6 mg/L

NOAEC: 0.625 mg/L

Acute toxicity for algae:

ErC50, 72h, *P. subcapitata* (OECD 201): 16.6 mg/L

NOAEC: 6.25 mg/L

### 12.2 Persistence and degradability

Tests carried out according to OECD 301B show that 80 % of the substance is degraded after 28 days. The substance can therefore be deemed as readily biodegradable.

### 12.3 Bioaccumulative potential

TOR is not considered to be bioaccumulative based on the BCF values for 10 substances. The BCF values vary from around 25 for chlorodehydroabietic acid to 130 for neoabietic acid.

### 12.4 Mobility in soil

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



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### 12.5 Results of PBT and vPvB assessment

Based on available data, the product is not considered to contain the PBT substances (hard to biodegrade, bioaccumulative and toxic) or vPvB substances (very hard to biodegrade and extremely bioaccumulative) according to REACH (regulation (EC) no. 1907/2006) annex XIII.

### 12.6 Other adverse effects

No known other effects.

## 13 WASTE TREATMENT

### 13.1 Waste treatment methods

Product residues, spills, etc. are hazardous waste. Disposal, transport, storage and handling of the waste takes place in accordance with the Swedish Waste Ordinance (2011:927). Avoid contamination of soil or waterways with waste, and do not dispose of waste outdoors.

Suitable waste code:

08 04 17\* Rosin oil

The waste code is only a suggestion and dependent on the product's use. The waste code must be assigned by the user based on the application for which the product is used.

## 14 TRANSPORT INFORMATION

Hardened product: Not classified as dangerous goods.

Hot product: Classified as dangerous goods, see below.

### 14.1 UN number

UN3257

### 14.2 UN proper shipping name

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

IMDG proper shipping name: LIQUID, ELEVATED TEMPERATURE, N.O.S. (rosin)

### 14.3 Transport hazard class

ADR/RID Label: 9

ADR/RID Class: 9

ADR/RID Class Code: M9

ADR/RID Hazard identification number: 99

IMDG Class: 9

IMDG Marine pollutant: No

IMDG EmS: F-A, S-P

IATA Class: 9

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### 14.4 Packing group

III

### 14.5 Environmental hazards

Not applicable

### 14.6 Special precautions for user

Tunnel restriction code: (D)

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

In case of bulk transport at sea

Product name: *Rosin*

Pollutant type: Y

Ship type: 2

## 15 REGULATORY INFORMATION

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

#### EU regulations

European parliament and council's regulation (EC) no. 1907/2006 (REACH).

European parliament and council's regulation (EC) no. 1272/2008 about classification, labelling and packing of substances and mixtures (CLP).

#### National regulations

The Swedish Work Environment Authority's regulation and general guidelines on hygienic limit values, AFS 2018:1.

The Swedish Work Environment Authority's regulations and general guidelines on chemical work environment risks, AFS 2011:19 Amended and reprinted in AFS 2011:19 regulations.

Waste ordinance (2011:927).

### 15.2 Chemical safety assessment

A chemical safety assessment has been conducted for this substance. Relevant exposure scenarios are attached as an annex to this safety data sheet.

## 16 OTHER INFORMATION

### Abbreviations

AFS: The Swedish Work Environment Authority's statutes.

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road.

BCF: Bioconcentration factor.

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EC50:	The concentration of a test substance which affects 50 % of a test population during a given period of time.
ErC50:	The concentration of a test substance which results in a 50 % reduction in growth rate during a given period of time.
IATA:	International Air Transport Association.
IMDG:	International Maritime Dangerous Goods.
Kow:	N-octanol/water partition coefficient.
LC50:	Deadly concentration for 50 % of a test population.
LD50:	Leathal dose for 50 % of the test population (leathal median dose).
NOAEC:	No observed adverse effect concentration.
PBT:	Persistent, Bioaccumulative and Toxic substances. PBT substances comply with the criteria in part 1, annex XIII in Reach.
RID:	The Regulation concerning the International Carriage of Dangerous Goods by Rail.
UVCB:	Substances with unknown or varying compositions, complex reaction products or biological material.
vPvB:	Very persistent and bioaccumulative substances. A vPvB substance complies with the criteria in part 2, annex XIII in REACH.

### Meaning of phrases

Skin Sens. 1: Skin sensitisation, Category 1.

H317: May cause an allergic skin reaction.

### Important literature references

Information from REACH registration of the substance.

Classification and labelling register.

### Manufacturer's notes

This safety data sheet has been compiled by SunPine AB in Piteå based on the details available to the company at the date of publication. The information should be seen as a guideline by purchasers of goods from SunPine AB and is meant to be used for health, safety and environmental purposes. The information cannot be seen as a specification or as a guarantee for any particular property in the product.

### Document history

Version	Date	Comment
4	16/01/2019	Revision of section 2, 4-9 and 13-16.
3	10/10/2017	Major revision of all sections

### Annexes

ES 1: Manufacturing 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