

## Section 1: Identification of the substance/mixture and of the company/undertaking

### Product identifier

<b>Name of the substance</b>	Rosin Ester
<b>Trade name of the substance</b>	SYLVATAC™ RE 103N
<b>Identification Number</b>	-
<b>Registration number</b>	-
<b>Product registration number</b>	Not available.
<b>Synonyms</b>	None.
<b>Product code</b>	200000001156
<b>Date of first issue</b>	07-October-2011
<b>Version number</b>	01
<b>Revision date</b>	-
<b>Supersedes date</b>	-

### Relevant identified uses of the substance or mixture and uses advised against

<b>Identified uses</b>	Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys).
<b>Uses advised against</b>	None known.

### Details of the supplier of the safety data sheet

#### Supplier

<b>Company name</b>	Arizona Chemical B.V.
<b>Address</b>	Transistorstraat 16 1322 CE Almere NL
<b>Telephone</b>	+31 36 546 2800
<b>e-mail</b>	regulatory.EU@azchem.com
<b>Contact person</b>	Not available.
<b>Emergency telephone number</b>	EU NCEC +44 1865 407 333
<b>SDS number</b>	5696E

## Section 2: Hazards identification

### Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This substance does not meet the criteria for classification according to Directive 67/548/EEC as amended.

### Classification according to Regulation (EC) No 1272/2008 as amended

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### Hazard summary

<b>Physical hazards</b>	Not classified for physical hazards.
<b>Health hazards</b>	Not classified for health hazards.
<b>Environmental hazards</b>	Not classified for hazards to the environment.
<b>Specific hazards</b>	Not available.
<b>Main symptoms</b>	Not available.

### Label elements

### Label according to Regulation (EC) No. 1272/2008 as amended

<b>Contains:</b>	Rosin Ester
------------------	-------------

<b>Identification Number</b>	-
<b>Hazard statements</b>	The substance does not meet the criteria for classification.
<b>Precautionary statements</b>	
<b>Prevention</b>	Not available.
<b>Response</b>	Not available.
<b>Storage</b>	Not available.
<b>Disposal</b>	Not available.
<b>Supplemental label information</b>	Not applicable.
<b>Other hazards</b>	Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air. Static charges generated by emptying package in or near flammable vapour may cause flash fire.

### Section 3: Composition/information on ingredients

#### Substance

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Rosin Ester	100	Proprietary -	01-2119486685-21-0001 01-2119486685-21-0000	-	

**Classification:**    **DSD:** -  
                                  **CLP:** -

CLP: Regulation No. 1272/2008.  
DSD: Directive 67/548/EEC.  
#: This substance has workplace exposure limit(s).

### Section 4: First aid measures

**General information**                    Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### Description of first aid measures

**Inhalation**                                If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

**Skin contact**                             Wash the skin immediately with soap and water. Get medical attention if irritation develops and persists. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

**Eye contact**                              Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.

**Ingestion**                                 Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**                    Not available.

**Indication of any immediate medical attention and special treatment needed**                    Not available.

### Section 5: Firefighting measures

**General fire hazards**                    High concentration of airborne dust may form explosive mixture with air. Static charges generated by emptying package in or near flammable vapour may cause flash fire. This product is not flammable.

#### Extinguishing media

**Suitable extinguishing media**                    Water spray, dry chemical, carbon dioxide.

**Unsuitable extinguishing media**                    None known. Do not use water jet as an extinguisher, as this will spread the fire.

**Special hazards arising from the substance or mixture**                    Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

## Advice for firefighters

**Special protective equipment for firefighters** Wear suitable protective equipment.

**Special firefighting procedures** Wear suitable protective equipment. In the event of fire, cool tanks with water spray.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Wear a dust mask if dust is generated above exposure limits. Avoid inhalation of dust from the spilled material. Avoid inhalation of fumes from molten product. Avoid contact with hot material.

**For emergency responders** Not available.

**Environmental precautions** No special environmental precautions required.

**Methods and material for containment and cleaning up** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Contain the discharged material. Avoid the generation of dusts during clean-up. Attempt to reclaim the free product, if this is possible. Collect and dispose of spillage as indicated in section 13.

**Reference to other sections** For waste disposal, see section 13.

## Section 7: Handling and storage

**Precautions for safe handling** Avoid heat, sparks, open flames and other ignition sources. Ground container and transfer equipment to eliminate static electric sparks. Avoid dust formation. Do not breathe dust from this material. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid release to the environment. Observe good industrial hygiene practices. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Ventilate as needed to control airborne dust. Use explosion-proof ventilation equipment if airborne dust levels are high. Avoid contact with hot material. Avoid breathing vapour from heated material. Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air.

**Conditions for safe storage, including any incompatibilities** Keep away from heat, sparks and open flame. Guard against dust accumulation of this material. Keep containers closed when not in use. Store at ambient temperature and atmospheric pressure.

**Specific end use(s)** Not available.

## Section 8: Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

#### UK. EH40 Workplace Exposure Limits (WELs)

Additional components	Type	Value	Form
Dust	TWA	4 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Inhalable dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Not available.

### DNEL

Components	Type	Route	Value	Form
Rosin Ester (Proprietary)	General Population	Dermal	15 mg/kg/day	Chronic exposure; Systemic
		Oral	15 mg/kg/day	Chronic exposure; Systemic
		Inhalation	52.174 mg/m <sup>3</sup>	Chronic exposure; Systemic
	Workers	Dermal	25 mg/kg/day	Chronic exposure; Systemic
		Inhalation	176.32 mg/m <sup>3</sup>	Chronic exposure; Systemic

### PNEC

Components	Type	Route	Value	Form
Rosin Ester (Proprietary)	Not applicable	Fresh water	1 mg/l	

Components	Type	Route	Value	Form
		Sea water	0.1 mg/l	
		Sewage Treatment Plant	2 mg/l	
		Sediment	726 µg/g	Fresh water
		Sediment	72.6 µg/g	Sea water
		Soil	144.6 mg/kg/dw	

#### Exposure controls

##### Appropriate engineering controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. Use explosion-proof ventilation equipment to stay below exposure limits.

##### Individual protection measures, such as personal protective equipment

###### General information

Not available.

###### Eye/face protection

Safety glasses. Use tight fitting goggles if dust is generated. Wear a face shield when working with molten material.

###### Skin protection

###### - Hand protection

Not normally needed.

###### - Other

Wear suitable protective clothing and gloves. For molten product, use any type rubber thermal insulating gloves and other clothing as necessary to protect from thermal burns.

###### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

###### Thermal hazards

Not available.

##### Hygiene measures

Handle in accordance with good industrial hygiene and safety practices. Eye wash fountain and emergency showers are recommended. Launder contaminated clothing before reuse.

##### Environmental exposure controls

Not available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

Pellets.

#### Physical state

Solid.

##### Form

Solid. Flakes.

##### Colour

Amber.

#### Odour

Mild.

#### Odour threshold

Not available.

#### pH

Not applicable.

#### Melting point/freezing point

Not available.

#### Boiling point, initial boiling point, and boiling range

Not available.

#### Flash point

> 200 °C (> 392 °F) Cleveland open cup

#### Auto-ignition temperature

> 200 °C (> 392 °F)

#### Flammability (solid, gas)

Not available.

#### Flammability limit - lower (%)

Not available.

#### Flammability limit - upper (%)

Not available.

#### Oxidising properties

Not applicable.

#### Explosive properties

Not applicable.

#### Explosive limit

Not applicable.

#### Vapour pressure

< 0.001 mm Hg at 20°C

#### Vapour density

Not applicable.

<b>Evaporation rate</b>	0 approx.; (n-BuAc=1)
<b>Relative density</b>	1.07 at 25°C/25°C;(water=1)
<b>Density</b>	1070 kg/m <sup>3</sup> at 20°C
<b>Solubility (water)</b>	< 0.1 % at 25°C
<b>Partition coefficient (n-octanol/water)</b>	3.6 at 20°C
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>VOC (Weight %)</b>	0 % estimated
<b>Percent volatile</b>	0 Weight % estimated
<b>Other data</b>	
<b>Chemical family</b>	Rosin Ester
<b>Flammability</b>	Not flammable
<b>Flammability class</b>	Not classified.
<b>Softening point</b>	98 - 105 °C (208.4 - 221 °F)
<b>Other information</b>	No relevant additional information available.

## Section 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Not available.
<b>Conditions to avoid</b>	Strong oxidizing agents. Avoid conditions which create dust. Keep away from heat, sparks and open flame. Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	This product may react with strong oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

## Section 11: Toxicological information

<b>General information</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Inhalation of dusts may cause respiratory irritation. Inhalation of vapours/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing or difficulty breathing.
<b>Skin contact</b>	Thermal burn hazard - contact with hot material may cause thermal burns.
<b>Eye contact</b>	Thermal burn hazard - contact with hot material may cause thermal burns.
<b>Symptoms</b>	Not available.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Not classified.

<b>Components</b>	<b>Test results</b>
Rosin Ester (Proprietary)	Acute Dermal LD50 New Zealand white rabbit: > 2000 mg/kg 14 days Acute Oral LD50 Sprague-Dawley rat: > 2000 mg/kg 14 days OECD 425 Acute Oral NOEL Sprague-Dawley rat: 1000 mg/kg/day 90 days

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Not classified.
----------------------------------	-----------------

**Skin corrosion/irritation**

Not classified.

**Product**

SYLVATAC™ RE 103N

**Test results**

Irritation Corrosion - Skin  
Result: negative  
Species: New Zealand white rabbit  
Organ: Skin  
Test Duration: 4 hr  
Observation Period: 72 hr  
Comments: No skin irritation.  
Notes: OECD 404

**Serious eye damage/eye irritation**

Not classified.

SYLVATAC™ RE 103N

FHSA Draize Eye  
Result: negative  
Species: New Zealand white rabbit  
Organ: Eye  
Test Duration: 7 days  
Observation Period: 7 days  
Comments: No eye irritation.

**Respiratory sensitisation**

Not available.

**Skin sensitisation**

Not classified.

SYLVATAC™ RE 103N

Local Lymph Node Assay - Lowest Concentration Producing Reaction  
Result: negative  
Species: Mouse  
Organ: Skin  
Comments: Not a skin sensitiser.  
Notes: OECD 429

Maximisation Assay (Magnusson and Kligman)  
Result: negative  
Species: Guinea pig  
Organ: Skin  
Comments: Not a skin sensitiser.  
Notes: OECD 406

SYLVATAC™ RE 103N

**Germ cell mutagenicity**

Not classified.

SYLVATAC™ RE 103N

Germ Cell Mutagenicity: Ames  
Result: negative  
Species: Salmonella typhimurium  
Comments: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  
Notes: OECD 471

SYLVATAC™ RE 103N

Germ Cell Mutagenicity: Chromosome Abberation  
Result: negative  
Species: Human  
Notes: OECD 473

SYLVATAC™ RE 103N

In vitro gene mutation study in mammalian cells  
Result: negative  
Species: Mouse  
Comments: This material is considered to be non-clastogenic to human lymphocytes in vitro.  
Notes: OECD 476

**Carcinogenicity**

Not classified.

**Reproductive toxicity**

Not available.

**Specific target organ toxicity - single exposure**

Not available.

**Specific target organ toxicity - repeated exposure**

Not available.

**Aspiration hazard**

Not available.

**Mixture versus substance information**

Not available.

**Other information**

This product has no known adverse effect on human health.

## Other information

This product has no known adverse effect on human health.

### Product

SYLVATAC™ RE 103N

### Test results

Cytotoxicity - in Vitro  
Result: negative  
Species: Human  
Organ: Fibroblasts cells  
Comments: Not cytotoxic  
Notes: BS 30993-5

Cytotoxicity - in Vitro  
Result: negative  
Species: Human  
Organ: Lung cell tissue  
Comments: Not cytotoxic  
Notes: BS 5736

Cytotoxicity - in Vitro  
Result: negative  
Species: Mouse  
Organ: Fibroblasts cells  
Test Duration: 72 hr  
Observation Period: 24 hr  
Comments: Not cytotoxic  
Notes: BS 5736

SYLVATAC™ RE 103N

SYLVATAC™ RE 103N

## Section 12: Ecological information

### Toxicity

#### Components

Rosin Ester (Proprietary)

#### Test results

EL50 Green algae (*Selenastrum capricornutum*): > 1000 mg/l  
72 hr OECD 201

EL50 Water flea (*Daphnia magna*): > 1000 mg/l 48 hr OECD  
202

LL50 Fathead minnow (*Pimephales promelas*): > 1000 mg/l 96  
hr OECD 203

\* Estimates for product may be based on additional component data not shown.

### Persistence and degradability

Not readily degradable.

#### Product

SYLVATAC™ RE 103N

#### Test results

Result: Not readily biodegradable.  
Species: Activated sewage sludge

**Bioaccumulative potential** Not available.

**Mobility** Not available.

### Environmental fate - Partition coefficient

#### Product

SYLVATAC™ RE 103N

#### Test results

3.62

**Mobility in soil** Not available.

**Results of PBT and vPvB assessment** Not classified.

**Other adverse effects** Not available.

## Section 13: Disposal considerations

### Waste treatment methods

#### Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### EU waste code

Not available.

#### Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

## Section 14: Transport information

### ADR

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

### ADN

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available.

## Section 15: Regulatory information

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

### EU Regulations

**Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer**

Not regulated.

**Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals**

Not regulated.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3**

Not listed.

**Regulation (EC) No. 689/2008 Import and export of dangerous chemicals**

Not regulated.

**Commission Decision 2000/479/EC on the implementation of a European pollutant emission register (EPER)**

Not listed.

**Regulation (EC) No. 1907/2006, Article 59(1). Candidate List**

Not listed.

**Regulation (EC) No. 1907/2006 Annex XIV Substance subject to autorisation**

Not regulated.

### Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

### National regulations

Not available.

### Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

### Water hazard class

#### VwVws

WGK1

## Section 16: Other information

### List of abbreviations

Not available.

### References

Not available.

### Information on evaluation method leading to the classification of mixture

Not available.

### Full text of any statements or R-phrases and H-phrases under Sections 2 to 15

None.

### Revision information

Not available.

### Training information

Not available.

**Disclaimer**

The information contained herein is based on data believed to be reliable and the manufacturer disclaims any liability incurred from the use or reliance upon the same. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety information is not a licence to use this material as claimed by any patents of third parties. The user alone must finally determine whether a contemplated use of this material will infringe any such patents, and for obtaining any required licenses.

**Issue date**

07-October-2011

**Revision date**

07-October-2011

**Print date**

07-October-2011