

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

Product identifier

Name of the substance	Resin acids and Rosin acids, fumarated, esters with glycerol
Trade name of the substance	SYLVACOTE™ 4983
Identification Number	-
Registration number	-
Product registration number	Not available.
Synonyms	None.
Product code	2000898, 2001200, 2001201
Date of first issue	19-September-2011
Version number	01
Revision date	-
Supersedes date	-

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

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

Details of the supplier of the safety data sheet

Supplier

Company name	Arizona Chemical B.V.
Address	Transistorstraat 16 1322 CE Almere NL
Telephone	+31 36 546 2800
e-mail	regulatory.EU@azchem.com
Contact person	Not available.
Emergency telephone number	EU NCEC +44 1865 407 333
SDS number	7412/5690E

Section 2: Hazards identification

Classification of the substance or mixture

The mixture 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

Classification Xi;R36, R43

The full text for all R-phrases is displayed in section 16.

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

Health hazards

Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Irritating to eyes. May cause sensitization by skin contact.
Environmental hazards	Not classified for hazards to the environment.

Specific hazards Irritating to eyes. May cause sensitization by skin contact.

Main symptoms Irritation of eyes and mucous membranes. Sensitisation.

Label elements

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

Contains: Resin acids and Rosin acids, fumarated, esters with glycerol

Identification Number -



Signal word Warning

Hazard statements H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Precautionary statements

Prevention P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.

Storage Not available.

Disposal P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information Not applicable.

Other hazards 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
Resin acids and Rosin acids, fumarated, esters with glycerol	100	97489-11-7 307-051-0	-	-	
Classification:	DSD: Xi;R36, R43				
	CLP: Skin Sens. 1;H317, Eye Irrit. 2;H319				

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

#: This substance has workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

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. Wash contaminated clothing before reuse.

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. For minor skin contact, avoid spreading material on unaffected skin.

Eye contact Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. 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

May cause allergic skin reaction. Irritation of eyes and mucous membranes.

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. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk through spilled material. Keep people away from and upwind of spill/leak. Ensure adequate ventilation.

For emergency responders

See Section 8 for personal protective equipment.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

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. Stop the flow of material, if this is without risk.

Reference to other sections

For waste disposal, see section 13. See Section 8 for personal protective equipment.

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. 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. Avoid contact with skin. Avoid contact with eyes. Wash hands thoroughly after handling.

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. Keep container tightly closed. Keep out of the reach of children.

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 ³ 10 mg/m ³	Respirable dust. Inhalable dust.

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

Recommended monitoring procedures Not available.

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. Wear a face shield when working with molten material. Wear eye/face protection.

Skin protection

- **Hand protection** Wear protective gloves.

- **Other** Wear suitable protective clothing and gloves. Eye wash fountain is recommended. 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 Avoid contact with eyes. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace. 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	Pellets.
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	269 °C (516 °F) Setaflash Closed 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.
Evaporation rate	0 approx.; (n-BuAc=1)
Relative density	1.14 at 25°C/25°C;(water=1)
Density	1140 kg/m ³ at 20°C
Solubility (water)	< 0.1 % at 25°C
Partition coefficient (n-octanol/water)	3.41 Data is for similar product.
Decomposition temperature	Not available.
Viscosity	Not available.
VOC (Weight %)	0 % estimated
Percent volatile	0 % Weight % estimated

Other data

Chemical family	Modified Rosin Ester
Flammability	Non flammable.
Flammability class	Combustible IIIB estimated Not classified.
Softening point	100 - 110 °C (212 - 230 °F) Ring & Ball
Weighted solids	100 %

Other information No relevant additional information available.

Section 10: Stability and reactivity

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

Section 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Ingestion	May irritate and cause malaise.
Inhalation	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.
Skin contact	May cause an allergic skin reaction. Thermal burn hazard - contact with hot material may cause thermal burns.
Eye contact	Thermal burn hazard - contact with hot material may cause thermal burns. Causes serious eye irritation.
Symptoms	Not available.
Information on toxicological effects	
Acute toxicity	May cause discomfort if swallowed.

Components	Test results
Resin acids and Rosin acids, fumarated, esters with glycerol (97489-11-7)	Acute Oral LD50 Rat: > 5000 mg/kg Data is for similar product. Acute Oral LD50 Rat: > 2000 mg/kg Data is for similar product. Acute Oral NOAEL Wistar rat: 300 mg/kg/day 8 weeks Data is for similar product.;Developmental Acute Oral NOEL Wistar rat: 1000 mg/kg/day 8 weeks Data is for similar product.;Reproductive

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

Skin corrosion/irritation

May cause sensitization by skin contact.

Product

SYLVACOTE™ 4983

Test results

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

Serious eye damage/eye irritation

Causes serious eye irritation.

Product

SYLVACOTE™ 4983

Test results

Irritation Corrosion - Eye
 Result: positive
 Species: New Zealand white rabbit
 Organ: Eye
 Comments: Data is for similar product.
 Notes: OECD 405

Respiratory sensitisation Not available.

Skin sensitisation

May cause sensitization by skin contact.

Product

SYLVACOTE™ 4983

Test results

50 % w/w Local Lymph Node Assay - Lowest Concentration
 Producing Reaction
 Result: positive
 Species: Mouse
 Comments: SI=4.24;May cause sensitization by skin contact.;
 Data is for similar product.
 Notes: OECD 429

Germ cell mutagenicity

Not classified.

Product

SYLVACOTE™ 4983

Test results

Germ Cell Mutagenicity: Ames
 Result: negative
 Species: Salmonella typhimurium
 Comments: Data is for a similar product.
 Notes: OECD 471

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Germ Cell Mutagenicity: Chromosome Abberation
 Result: negative
 Species: Human
 Comments: Data is for a similar product.
 Notes: OECD 473

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In Vitro Mammalian Cell Gene Mutation Test
 Result: negative
 Species: Mouse
 Comments: No data available to indicate product or any
 components present at greater than 0.1% are mutagenic or
 genotoxic.; Data is for a similar product.
 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 Not available.

Section 12: Ecological information

Toxicity

Components	Test results
Resin acids and Rosin acids, fumarated, esters with glycerol (97489-11-7)	EC50 Water flea (Daphnia magna): > 100 mg/l 48 hr Data is for similar product.

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

Persistence and degradability

Not readily degradable.

Product	Test results
SYLVACOTE™ 4983	46 % OECD 301B Result: Not readily biodegradable. Comments: Data is for similar product.

Bioaccumulative potential Not available.

Mobility Not available.

Environmental fate - Partition coefficient

Product	Test results
SYLVACOTE™ 4983	3.41 Comments: Data is for similar product.

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.

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

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

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

R36 Irritating to eyes.
R43 May cause sensitization by skin contact.

H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.

Revision information

Not available.

Training information

Not available.

Disclaimer

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