



# SAFETY DATA SHEET

## Shavit 25 EC

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Version 2

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### Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product identifier

## Shavit 25 EC

Synonyms

Triadimenol 250 EC

Pure substance/mixture

Mixture

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

Recommended Use

Fungicide

Uses advised against

No information available

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

Supplier Address

ADAMA SOUTH AFRICA (PTY) LTD  
Ground Floor, Simeka House  
The Vineyards Office Estate  
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### Section 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 1 - (H318)
Reproductive toxicity	Category 1B - (H360)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Acute aquatic toxicity	Category 2 - (H401)
Chronic aquatic toxicity	Category 2 - (H411)

#### Label Elements

Hazard pictograms



**Signal word**

Danger

**Hazard Statements**

H302 - Harmful if swallowed  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation  
 H360 - May damage fertility or the unborn child  
 H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P201 - Obtain special instructions before use  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Mixture**

Chemical Name	Weight-%	CAS No	EC No	GHS Classification	M-Factor
Triadimenol	21 - 25	55219-65-3	259-537-6	Acute Tox. 4 (H302) Repr. 1B (H360) Lact (H362) Aquatic Chronic 2 (H411)	
N-Methyl-2-pyrrolidone	41 - 45	872-50-4	212-828-1	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360) STOT SE 3 (H335)	
Rosin	15 - 19	8050-09-7	232-475-7	Skin Sens. 1 (H317)	

Full text of H- and EUH-phrases: see section 16

**Section 4: FIRST AID MEASURES**

**First aid measures**

**General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

**Inhalation**

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Ingestion** Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

**Self-protection of the first aider** Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**Section 5: FIRE-FIGHTING MEASURES**

**Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

**Special hazards arising from the substance or mixture**

No specific hazard known.

**Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus  
In the event of fire and/or explosion do not breathe fumes.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**Reference to other sections**

**Other Information**

See also section 8,13

## Section 7: HANDLING AND STORAGE

### Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

#### General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.

### Specific end use(s)

#### Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### National occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
N-Methyl-2-pyrrolidone 872-50-4		STEL: 75 ppm STEL: 309 mg/m <sup>3</sup> TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> Skin	TWA: 40 mg/m <sup>3</sup> TWA: 10 ppm STEL: 80 mg/m <sup>3</sup> STEL: 20 ppm	S* STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> TWA: 10 ppm TWA: 40 mg/m <sup>3</sup>	TWA: 20 ppm TWA: 82 mg/m <sup>3</sup> Ceiling / Peak: 40 ppm Ceiling / Peak: 164 mg/m <sup>3</sup> Skin
Rosin 8050-09-7		TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>		
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
N-Methyl-2-pyrrolidone 872-50-4			Skin STEL: 80 mg/m <sup>3</sup> TWA: 40 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> Skin	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
N-Methyl-2-pyrrolidone 872-50-4	Skin STEL 20 ppm STEL 80 mg/m <sup>3</sup> TWA: 10 ppm TWA: 40 mg/m <sup>3</sup>	Skin STEL: 40 ppm STEL: 160 mg/m <sup>3</sup> TWA: 20 ppm TWA: 80 mg/m <sup>3</sup>	STEL: 80 mg/m <sup>3</sup> TWA: 40 mg/m <sup>3</sup> Skin	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> Skin STEL: 20 ppm STEL: 80 mg/m <sup>3</sup>	TWA: 25 ppm TWA: 101 mg/m <sup>3</sup> Skin
Rosin 8050-09-7					TWA: 0.05 mg/m <sup>3</sup> STEL: 0.15 mg/m <sup>3</sup>

### Exposure controls

#### Engineering Controls

Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

##### Eye/face protection

Tight sealing safety goggles.

<b>Hand Protection</b>	Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).
<b>Body Protection</b>	Suitable protective clothing, Gloves made of plastic or rubber.
<b>Respiratory protection</b>	Use only with adequate ventilation.
<b>General Hygiene Considerations</b>	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.
<b>Environmental exposure controls</b>	No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
Physical state	: liquid		
Color	: No information available		
Odor	: No information available		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 6 - 7	CIPAC MT 75.2	
<b>Melting point/freezing point °C</b>	: No data available		
<b>Boiling point/boiling range °C</b>	: No data available		
<b>Flash point °C</b>	: 113	92/69/EEC A.9	
<b>Evaporation rate</b>	: Not Applicable		
<b>Flammability (solid, gas)</b>	: Not Applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: No data available		
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: No data available		
<b>Solubility(ies) mg/l</b>	: No data available		
<b>Partition Coefficient (n-octanol/water) Log Pow</b>	:		See Section 12 for more information
<b>Autoignition temperature °C</b>	: No data available		
<b>Decomposition temperature °C</b>	: No data available		
<b>Kinematic viscosity mm<sup>2</sup>/s 40 °C</b>	: 62	OECD 114	
<b>Explosive properties</b>	: Not an explosive	EEC A.14	
<b>Oxidizing properties</b>	: No data available		
<b>Other Information</b>			
<b>Bulk density g/ml</b>	:		
<b>Surface tension mN/m</b>	: Not Applicable		

## Section 10: STABILITY AND REACTIVITY

### Reactivity

Not available.

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible Materials**

No information available

**Hazardous Decomposition Products**

None under normal use conditions.

**Section 11: TOXICOLOGY INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 1483	Rat		
Dermal LD50 mg/kg	: >2000	Rat		
Inhalation LC50 mg/l/4h	: >5.3	Rat		
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit		
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit		
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig		

**Chronic toxicity**

**Germ cell mutagenicity**

**Chemical Name**  
Triadimenol : Not classified

**Carcinogenicity**

**Chemical Name**  
Triadimenol : Not Carcinogenic

**Reproductive toxicity**

**Chemical Name**  
Triadimenol : May damage fertility or the unborn child

**STOT - single exposure**

**Chemical Name**  
Triadimenol : No data available

**STOT - repeated exposure**

**Chemical Name**  
Triadimenol : No data available

**Aspiration hazard**

**Chemical Name**  
Triadimenol : No data available

**Section 12: ECOLOGICAL INFORMATION**

**Toxicity**

**Aquatic toxicity**

<b>Acute toxicity</b>	<b>Values</b>	<b>Species</b>	<b>Method</b>	<b>Remarks</b>
Fish 96-hour LC50 mg/l	: 3.47	Rainbow trout		
Crustacea 48-hour EC50 mg/l	: 8.5	Daphnia magna		
Algae 72-hour EC50 mg/l	: 10			
Other plants EC50 mg/l	:			No data available

<b>Chronic aquatic toxicity</b>	<b>Values</b>	<b>Species</b>	<b>Method</b>	<b>Remarks</b>
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: No data available			
Other plants NOEC mg/l	: No data available			

**Terrestrial Toxicity**

<b>Birds Oral LD50 mg/kg</b>				
<b>Chemical Name</b>				
Triadimenol	: >2000	Bobwhite quail		

**Bees Oral LD50 µg/bee**

<b>Chemical Name</b>				
Triadimenol	: >224.8			

**Persistence and degradability**

<b>Abiotic Degradation</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
<b>Water DT50 days</b>			
<b>Chemical Name</b>			
Triadimenol	: 353		221 °C

<b>Soil DT50 days</b>			
<b>Chemical Name</b>			
Triadimenol	: 127.6		

<b>Biodegradation</b>			
<b>Chemical Name</b>			
Triadimenol	: No data available		

**Bioaccumulative potential**

<b>Partition Coefficient</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
<b>(n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow</b>			
<b>Chemical Name</b>			
Triadimenol	: 3.08 - 3.28		251 °C

<b>Bioconcentration factor (BCF)</b>			
<b>Chemical Name</b>			
Triadimenol	: 21		

**Mobility in soil**

<b>Adsorption/Desorption</b>	<b>Values</b>	<b>Method</b>	<b>Remarks</b>
<b>Chemical Name</b>			
Triadimenol	: 14 - 702		KOC

**Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**Other adverse effects**

No information available.

### Section 13: DISPOSAL CONSIDERATIONS

#### Waste treatment methods

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

### Section 14: TRANSPORTATION INFORMATION

#### IMDG/IMO

<b>UN/ID No *</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Triadimenol )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	

#### RID/ADR

<b>UN/ID No *</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Triadimenol )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Environmental hazard</b>	Yes
<b>Special precautions for user</b>	

#### ICAO/IATA

<b>UN/ID No *</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Triadimenol )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Environmental hazard</b>	Yes
<b>Special precautions for user</b>	
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not Applicable



\* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

### Section 15: REGULATORY INFORMATION

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

## Section 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed  
H412 - Harmful to aquatic life with long lasting effects  
H317 - May cause an allergic skin reaction  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H360D - May damage the unborn child  
H335 - May cause respiratory irritation

### Revision Note

Changes made to the last version are labeled with this sign \*\*\*.

### List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
CAS Number - Chemical Abstracts Service number  
EC Number - EINECS and ELINCS Number  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
OECD - Organization for Economic Co-operation and Development  
PBT - Persistent, Bioaccumulative and Toxic substance  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
STOT - Specific Target Organ Toxicity  
vPvB - Very Persistent and Very Bioaccumulative

### Disclaimer

**The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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.**

End of Safety Data Sheet