

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date 17-May-2022

Revision Number 1

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

### 1.1. Product identifier

**Product Name** ATLAS  
**Product Code(s)** TP.3037.I.1\_\_\_ISR  
**Chemical name** Bifenthrin 100 EC  
**Pure substance/mixture** Mixture

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

**Recommended use** Insecticide; For professional users only  
**Uses advised against** No information available

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

#### Manufacturer

Tapazol Chemical Works Ltd.  
1st HaSolela st.  
West. Ind. Zone  
Beit Shemesh, Israel 9905415  
Tel: +972-2-992-6040  
Fax: +972-2-9926050  
For further information, please contact [sds@tapazol.co.il](mailto:sds@tapazol.co.il)

### 1.4. Emergency telephone number

**Emergency Telephone** +972 4 777 1900  
National Institute for Information on Poisoning  
Rambam Health Care Campus, Haifa, Israel

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

<b>Aspiration hazard</b>	Category 1 - (H304)
<b>Acute toxicity - Oral</b>	Category 4 - (H302)
<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4 - (H332)
<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Skin sensitization</b>	Category 1 - (H317)
<b>Carcinogenicity</b>	Category 2 - (H351)
<b>Reproductive toxicity</b>	Category 1 - (H360D)
<b>Specific target organ toxicity (single exposure)</b>	Category 3 - (H336)
<b>Specific target organ toxicity (repeated exposure)</b>	Category 1 - (H372)
<b>Acute aquatic toxicity</b>	Category 1 - (H400)
<b>Chronic aquatic toxicity</b>	Category 1 - (H410)

**2.2. Label elements**

Contains Solvent Naphtha (Petroleum), Heavy Aromatic, 4-Nonylphenol, branched, ethoxylated, Bifenthrin (ISO), 1-Methylpyrrolidin-2-one



**Signal word**  
Danger

**Hazard statements**

H302 - Harmful if swallowed  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled  
 H336 - May cause drowsiness or dizziness  
 H351 - Suspected of causing cancer  
 H360D - May damage the unborn child  
 H372 - Causes damage to organs through prolonged or repeated exposure  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - EU (§28, 1272/2008)**

P102 - Keep out of reach of children  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
 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  
 P331 - Do NOT induce vomiting  
 P391 - Collect spillage  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**Additional information**

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

**2.3. Other hazards****Endocrine Disruptor Information**

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
4-Nonylphenol, branched, ethoxylated	Group III Chemical	-
Naphthalene	Group III Chemical	-

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bifenthrin (ISO)	-	82657-04-3	9-12	Acute Tox. 2 (H300) Skin Sens. 1B (H317) Acute Tox. 3 (H331) Carc. 2 (H351) STOT RE 1 (H372) (nervous system) Aquatic Acute 1 (H400) M=10000 Aquatic Chronic 1 (H410) M=100000
Solvent Naphtha (Petroleum), Heavy Aromatic	265-198-5	64742-94-5	58-66	Asp. Tox. 1 (H304) STOT SE 3 (H336) Aquatic Chronic 2 (H411)
4-Nonylphenol, branched, ethoxylated	---	127087-87-0	11-14	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)
1-Methylpyrrolidin-2-one	212-828-1	872-50-4	7-10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360D) STOT SE 3 (H335)
Naphthalene	202-049-5	91-20-3	0.3-0.8	Acute Tox.4 (H302) Carc.2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
1-Methylpyrrolidin-2-one	872-50-4	X
4-Nonylphenol, branched, ethoxylated	127087-87-0	X

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

**Inhalation**

Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.

**Eye contact**

Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact**

Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Ingestion**

Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious

person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid breathing vapors or mists. See section 8 for more information.

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

**Symptoms** Burning sensation. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation.

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

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Dry chemical, CO<sub>2</sub>, water spray or regular foam.  
**Large Fire** Water spray, fog or regular foam  
 Dike fire-control water for later disposal  
 Move containers from fire area if you can do it without risk

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

#### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

#### **5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

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

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
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**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes. Avoid breathing vapors or mists.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from other materials.
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**7.3. Specific end use(s)**

<b>Risk Management Methods (RMM)</b>	The information required is contained in this Safety Data Sheet.
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**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

Chemical name	European Union	Austria	Belgium	Netherlands	Bulgaria
1-Methylpyrrolidin-2-one 872-50-4	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 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> H* Skin sensitizer	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> *	TWA: 40 mg/m <sup>3</sup> STEL: 80 mg/m <sup>3</sup> H*	STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> K*
Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 53 mg/m <sup>3</sup> STEL: 15 ppm STEL: 80 mg/m <sup>3</sup> *	TWA: 50 mg/m <sup>3</sup> STEL: 80 mg/m <sup>3</sup> H*	STEL: 75.0 mg/m <sup>3</sup> TWA: 50.0 mg/m <sup>3</sup>
Chemical name	Denmark	Germany	France	United Kingdom	Spain
1-Methylpyrrolidin-2-one 872-50-4	TWA: 5 ppm TWA: 20 mg/m <sup>3</sup> H*	TWA: 20 ppm TWA: 82 mg/m <sup>3</sup> H*	TWA: 40 mg/m <sup>3</sup> TWA: 10 ppm STEL: 80 mg/m <sup>3</sup> STEL: 20 ppm *	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> Sk*	TWA: 10 ppm TWA: 40 mg/m <sup>3</sup> STEL: 20 ppm STEL: 80 mg/m <sup>3</sup> vía dérmica*

Naphthalene 91-20-3	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup>	TWA: 0.4 ppm TWA: 2 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup>	-	TWA: 10 ppm TWA: 53 mg/m <sup>3</sup> STEL: 15 ppm STEL: 80 mg/m <sup>3</sup> via dérmica*
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## Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
1-Methylpyrrolidin-2-one 872-50-4	-	-	-	20 mg/g Creatinine - urine (2-Hydroxy-N-methyl- succinimide) - about 16 hours after completion of the work shift 70 mg/g Creatinine - urine (5-Hydroxy-N-methyl- 2-pyrrolidone) - 2-4 times after the work shift/break	-
Chemical name	Denmark	Finland	France	Germany	Germany MAK
1-Methylpyrrolidin-2-one 872-50-4	-	-	-	150 mg/L (urine - 5-Hydroxy-N-methyl- 2-pyrrolidone end of shift) 150 mg/L - BAT (end of exposure or end of shift) urine	150 mg/L (urine - 5-Hydroxy-N-methyl- 2-pyrrolidone end of shift)
Naphthalene 91-20-3	-	-	-	35 µg/L - BAR (end of exposure or end of shift) urine 35 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) urine	-
Chemical name	Hungary	Ireland	Italy	Italy REL	
1-Methylpyrrolidin-2-one 872-50-4	-	20 mg/g Creatinine (urine - 2-Hydroxy-N-Methylsuccinimide morning after shift (8 hours)) 70 mg/g Creatinine (urine - 5-Hydroxy-N-methyl-2-pyrrolidone 2-4 hours after the end of the shift)	-	100 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - end of shift	
Naphthalene 91-20-3	-	4 µmol/mol Creatinine (urine - 1-Hydroxypyrene post shift)	-	- () - end of shift	
Chemical name	Latvia	Luxembourg	Romania	Slovakia	
Naphthalene 91-20-3	-	-	-	5.66 µg/L - urine (1-Hydroxypyrene) - end of exposure or work shift	
Chemical name	Slovenia	Spain	Switzerland	United Kingdom	
1-Methylpyrrolidin-2-one 872-50-4	150 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - at the end of the work shift	20 mg/g Creatinine (urine - 2-Hydroxy-N-methylsuccinimide pre-shift)	-	-	

		70 mg/g Creatinine (urine - 5-Hydroxy-N-methyl-2-py rrolidone between 2-4 hours after the final exposure)		
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## 8.2. Exposure controls

### Personal protective equipment

<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Hand protection</b>	Wear suitable gloves.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Color</b>	yellow
<b>Odor</b>	Aromatic Solvent

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6 - 7	
pH (as aqueous solution)		
Melting point / freezing point		
Boiling point / boiling range		
Flash point	>60 °C	
Evaporation rate	No data available.	
Flammability (solid, gas)	No data available.	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available.	
Lower flammability or explosive limits	No data available.	
Vapor pressure	No data available.	
Vapor density	No data available.	
Relative density	0.97 - 1.07	
Water solubility	Dispersible	
Solubility(ies)	No data available.	
Partition coefficient	No data available.	
Autoignition temperature	No data available.	
Decomposition temperature		
Kinematic viscosity	18.8 mm <sup>2</sup> /s	
Dynamic viscosity	No data available.	

### 9.2. Other information

**SECTION 10: Stability and reactivity****10.1. Reactivity****10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**10.4. Conditions to avoid**

**Conditions to avoid** Excessive heat.

**10.5. Incompatible materials**

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

**Oral LD50** 500 mg/kg. Acute Tox. 4 (H302) Classification based on test data.  
**Dermal LD50** >2000 mg/kg. Based on available data, the classification criteria are not met.  
**Inhalation LC50** No data available. Based on calculation method, the classification criteria are not met.

**Skin corrosion/irritation** Non-irritating to the skin. Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Irritating to eyes. Eye Irrit. 2 - H319. Classification based on test data.

**Respiratory or skin sensitization** Skin sensitizer. Skin Sens. 1 (H317). Classification based on test data.

**Germ cell mutagenicity**

Chemical name	European Union
Bifenthrin (ISO)	Not classified
1-Methylpyrrolidin-2-one	Not classified
Naphthalene	Not classified

**Carcinogenicity** H351 - Suspected of causing cancer. Classification based on calculation method.

Chemical name	European Union
Bifenthrin (ISO)	Cat.2 (H351)
1-Methylpyrrolidin-2-one	Not classified
Naphthalene	Carc. 2 (H351)

**Reproductive toxicity** H360D - May damage the unborn child. Classification based on calculation method.

Chemical name	European Union
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Bifenthrin (ISO)	Not classified
1-Methylpyrrolidin-2-one	Repr. 1B (H360D)
Naphthalene	Not classified

**STOT - single exposure** H336 - May cause drowsiness or dizziness. Classification based on calculation method.

**STOT - repeated exposure** H372 - Causes damage to organs through prolonged or repeated exposure. Classification based on calculation method.

**Aspiration hazard** Not classified. (Based on available data, the classification criteria are not met).

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** Very toxic to aquatic life:  
H400 - Classification based on calculation method.  
Very toxic to aquatic life with long lasting effects:  
H410 - Classification based on calculation method.

Highly toxic to bees [Bifenthrin].

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bifenthrin (ISO)	Acute toxicity: LC50 = 0.822 mg/L; Chronic toxicity NOEC = 10 mg/L	Acute: LC50=0.0001 mg/L Chronic NOEC=0.000012 mg/L	Acute toxicity: LC50 = 0.000015 mg/L; Chronic toxicity: NOEC = NA	Acute: EC50=0.00011 mg/L Chronic NOEC=0.00000095 mg/L

### 12.2. Persistence and degradability

**Persistence and degradability** Not rapidly degradable [Bifenthrin].

### 12.3. Bioaccumulative potential

**Bioaccumulation** Bioaccumulative potential [Bifenthrin].

**Bioconcentration factor (BCF)** log Pow = 6.6 [Bifenthrin]

### Component Information

Chemical name	Partition coefficient
Bifenthrin (ISO)	6.6
1-Methylpyrrolidin-2-one	-0.46

### 12.4. Mobility in soil

**Mobility in soil** Low mobility in soil [Bifenthrin].

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The components in formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Bifenthrin (ISO)	The substance is not PBT / vPvB
Solvent Naphtha (Petroleum), Heavy Aromatic	The substance is not PBT / vPvB
4-Nonylphenol, branched, ethoxylated	The substance is not PBT / vPvB
1-Methylpyrrolidin-2-one	The substance is not PBT / vPvB
Naphthalene	The substance is not PBT / vPvB

**12.6. Other adverse effects****Endocrine Disruptor Information**

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disrupters - Evaluated Substances
4-Nonylphenol, branched, ethoxylated	Group III Chemical	-
Naphthalene	Group III Chemical	-

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**SECTION 14: Transport information****IMDG**

**14.1 UN number** 3082  
**14.2 UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. [Bifenthrin], [Solvent Naphtha (Petroleum), Heavy Aromatic]  
**14.3 Transport hazard class(es)** 9  
**14.4 Packing group** III  
**14.5 Marine pollutant** Yes  
**Environmental hazards** Yes  
**14.6 Special precautions for user**  
**Special Provisions** None  
**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

**RID**

**14.1 UN number** 3082  
**14.2 UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. [Bifenthrin], [Solvent Naphtha (Petroleum), Heavy Aromatic]  
**14.3 Transport hazard class(es)** 9  
**14.4 Packing group** III  
**14.5 Environmental hazards** Yes  
**14.6 Special precautions for user**  
**Special Provisions** None

**ADR**

**14.1 UN number** 3082  
**14.2 UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. [Bifenthrin], [Solvent Naphtha (Petroleum), Heavy Aromatic]  
**14.3 Transport hazard class(es)** 9  
**14.4 Packing group** III  
**14.5 Environmental hazards** Yes  
**14.6 Special precautions for user**  
**Special Provisions** None

**IATA**

**14.1 UN number** 3082  
**14.2 UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. [Bifenthrin], [Solvent Naphtha (Petroleum), Heavy Aromatic]  
**14.3 Transport hazard class(es)** 9  
**14.4 Packing group** III  
**14.5 Environmental hazards** Yes  
**14.6 Special precautions for user**

Special Provisions None

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number	Title
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	RG 84	-
1-Methylpyrrolidin-2-one 872-50-4	RG 84	-

**Germany****Water hazard class (WGK)** Obviously hazardous to water (WGK 2)**European Union**

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

**Authorizations and/or restrictions on use:**

This product contains one or more substance(s) subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
4-Nonylphenol, branched, ethoxylated - 127087-87-0		X
1-Methylpyrrolidin-2-one - 872-50-4	72. 30. 71.	

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex Number
4-Nonylphenol, branched, ethoxylated - 127087-87-0	I.1 I.2

**Dangerous substance category per Seveso Directive (2012/18/EU)**

H2 - ACUTE TOXIC

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable**International Inventories****TSCA**

Contact supplier for inventory compliance status

**DSL/NDL**

Contact supplier for inventory compliance status

**EINECS/ELINCS**

Contact supplier for inventory compliance status

**ENCS**

Contact supplier for inventory compliance status

**IECSC**

Contact supplier for inventory compliance status

**KECL**

Contact supplier for inventory compliance status

**PICCS**

Contact supplier for inventory compliance status

**AICS**

Contact supplier for inventory compliance status

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment****SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H300 - Fatal if swallowed  
H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H331 - Toxic if inhaled  
H332 - Harmful if inhaled  
H335 - May cause respiratory irritation  
H336 - May cause drowsiness or dizziness  
H351 - Suspected of causing cancer  
H360D - May damage the unborn child  
H372 - Causes damage to organs through prolonged or repeated exposure  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects  
H411 - Toxic to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Classification procedure**

H302 - Classification based on test data  
H304 - Classification based on test data  
H315 - Classification based on Plant Protection authority opinion in Israel  
H317 - Classification based on test data  
H319 - Classification based on test data  
H332 - Classification based on Plant Protection authority opinion in Israel  
H336 - Classification based on calculation method  
H351 - Classification based on calculation method  
H360D - Classification based on calculation method  
H372 - Classification based on calculation method  
H400 - Classification based on calculation method  
H410 - Classification based on calculation method

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

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**End of Safety Data Sheet**