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

1.1. Product identifier
Name of product: Anti-Spider Spray
Art-Nr 02.1928.00

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended intended purpose(s)
Remedy against spiders.

Effect of the substance / the mixture
The product is used as a biocide.

1.3. Details of the supplier of the safety data sheet
Manufacturer/distributor: Yachticon A. Nagel GmbH
Bürgermeister-Bombeck-Str. 1, D-22851 Norderstedt
Phone +49 40 511 3780, Fax +49 40 51 74 37
E-Mail yachticon@yachticon.de
Internet www.yachticon.de

Advice
Phone +49 40 511 37 80
Fax +49 40 51 74 37
E-mail (competent person): yachticon@yachticon.de

1.4. Emergency telephone number
Emergency advice
Giftinformationszentrale Berlin
Phone +49 (0)30 192 40
Information in German.

! SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
! Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Hazard classes and Hazard</th>
<th>Hazard statements</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2</td>
<td>H225</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>H319</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>H317</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>H410</td>
<td></td>
</tr>
</tbody>
</table>

! Hazard statements for physical hazards
H225 Highly flammable liquid and vapour.

! Hazard statements for health hazards
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

! Hazard statements for environmental hazards
H410 Very toxic to aquatic life with long lasting effects.

Additional hints
This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].
2.2. Label elements
Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

GHS02  GHS07  GHS09

† Signal word
Danger

† Hazard statements for physical hazards
H225 Highly flammable liquid and vapour.

† Hazard statements for health hazards
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

† Hazard statements for environmental hazards
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

General
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

† Prevention
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P233 Keep container tightly closed.
P261 Avoid inhalation of vapors / spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

† Response
P303 + P361 + IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P353
P305 + P351 + IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P338
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

† Storage
P403 + P235 Store in a well-ventilated place. Keep cool.

† Disposal
P501 Dispose of contents/container to an approved waste handling.

† Hazardous ingredients for labeling
Citronellal, m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Additional information

Special rules on packaging
Touchable warning sign (EN/ISO 11683).
Remark
Use biocides safely. Always read the label and product information before use.

2.3. Other hazards
No information available.

! SECTION 3: Composition/ information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Hazardous ingredients

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Name</th>
<th>[% weight]</th>
<th>Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]</th>
</tr>
</thead>
<tbody>
<tr>
<td>52645-53-1</td>
<td>258-067-9</td>
<td>m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate</td>
<td>0.5-1</td>
<td>Acute Tox. 4, H332 / Acute Tox. 4, H302 / Skin Sens. 1, H317 / Aquatic Acute 1, H400 M=1000 / Aquatic Chronic 1, H410 M=1000</td>
</tr>
<tr>
<td>69011-36-5</td>
<td>500-241-6</td>
<td>Isotridecanol, ethoxylated &lt; 2.5 EO</td>
<td>&lt; 0.5</td>
<td>Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>64-17-5</td>
<td>200-578-6</td>
<td>ethanol</td>
<td>&gt; 70 &lt; 90</td>
<td>Flam. Liq. 2, H225 / Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>106-23-0</td>
<td>203-376-6</td>
<td>Citronellal</td>
<td>&gt; 0,1 &lt; 0,3</td>
<td>Skin Irrit. 2, H315 / Skin Sens. 1, H317 / Flam. Liq. 3, H226 / Aquatic Chronic 2, H411</td>
</tr>
</tbody>
</table>

REACH

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Name</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>69011-36-5</td>
<td>Isotridecanol, ethoxylated &lt; 2.5 EO</td>
<td>01-2119976362-32-XXXX</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>01-2119457610-43-XXXX</td>
</tr>
</tbody>
</table>

! Additional advice
Contains permethrin (CAS Nr. 52645-53-1)
Contains Piperonyl butoxide/PBO

Labelling for contents according to regulation (EC) No 648/2004, annex VII
CITRONELLOL (CAS 106-22-9)
LIMONENE (CAS 5989-27-5)

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.

In case of inhalation
Ensure of fresh air.

In case of skin contact
In case of contact with skin wash off immediately with soap and water.

In case of eye contact
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Remove contact lenses.
In case of ingestion
Do not induce vomiting.
Seek medical advice immediately.
Rinse out mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Alcohol-resistant foam
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
Fire gas of organic material has to be classed invariably as respiratory poison.
In the event of fire the following can be released:
Carbon monoxide (CO)
Carbon dioxide (CO2)

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Use breathing apparatus with independent air supply (isolated).

Additional information
Cool endangered containers with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
High risk of slipping due to leakage/spillage of product.
Residues of fire and contaminated fire extinguishing water must not enter drains, surface water or groundwater.
Remove containers from the danger area, if possible without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Ensure adequate ventilation.
Avoid skin and eye contact.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions
Do not discharge into the drains/surface waters/groundwater.
6.3. Methods and material for containment and cleaning up
Take up with absorbent material (e.g. sand, general-purpose binder, kieselguhr).
After taking up the material dispose according to regulation.

6.4. Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8
Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Avoid formation of aerosols.
Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.
Hot product produces combustible vapours.
Avoid inhalation of vapors.
Take the usual precautions when handling with chemicals.
Handle in accordance with good industrial hygiene and safety practice.

General protective measures
Do not inhale vapours.
Avoid contact with eyes and skin

Hygiene measures
Clean skin thoroughly after working.
At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.
Keep away from food and drink.

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking
Vapours can form an explosive mixture with air.
Precautionary measures against electrostatic charging necessary.
Avoid effect of heat.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in closed original container.
Only use containers that are approved specifically for the substance/product.

Advice on storage compatibility
Do not store with acids.
Do not store together with oxidizing agents.

Further information on storage conditions
Keep container tightly closed and store at cool and aired place.

Storage group 3
Fire class B
7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls
Respiratory protection
Breathing apparatus in the event of high concentrations.
Short term: filter apparatus, filter A

Hand protection
The selection of the suitable gloves does not only depend on different material, but also on further marks of quality and varies from manufacturer to manufacturer.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.
Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Butyl, 0,3 mm, 480 min. e.g. "Butoject"; KCL GmbH, Email: Vertrieb@kcl.de.

Eye protection
safety goggles

Other protection measures
Light protective clothing.

Appropriate engineering controls
Ensure good ventilation, where necessary use fume hood.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Colour</th>
<th>Odour</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid</td>
<td>yellowish</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

Odour threshold
not determined

Important health, safety and environmental information

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Temperature</th>
<th>at</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH value</td>
<td>ca. 7</td>
<td>20 °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>boiling point</td>
<td>ca. 78 °C</td>
<td>1013 hPa</td>
<td></td>
<td></td>
<td>Data refer to the main component.</td>
</tr>
<tr>
<td>melting point</td>
<td>-114 °C</td>
<td></td>
<td></td>
<td></td>
<td>Data refer to the main component.</td>
</tr>
<tr>
<td>Flash point</td>
<td>ca. 19 °C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapourisation rate</td>
<td>not determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammable (solid)</td>
<td>not determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Flammability (gas)

- **Ignition temperature**: ca. 400 °C

  **Remark**: The data refer to the main component.

- **Self ignition temperature**: not determined

- **Lower explosion limit**: 15 Vol-%

  **Remark**: Data refer to the main component.

- **Upper explosion limit**: 3,5 Vol-%

  **Remark**: Data refer to the main component.

- **Vapour pressure**: ca. 60 hPa 20 °C

  **Remark**: Data refer to the main component.

- **Relative density**: 0,83 g/cm³ 20 °C

- **Vapour density**: not determined

- **Solubility in water**: 20 °C soluble

- **Solubility/other**: not determined

- **Partition coefficient n-octanol/water (log P O/W)**: -0,3 20 °C n-Octanol/Wasser

  **Remark**: Data refer to the main component.

- **Decomposition temperature**: not determined

- **Viscosity**: not determined

- **Solvent content**: 70 - 80 %

### Oxidising properties

No information available.

### Explosive properties

Could form explosive mixtures with air.

### 9.2. Other information

No information available.
! SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable under normal conditions of use.
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Reactions with acids and strong oxidising agents.

10.4. Conditions to avoid
Heat, open flames, sparks

10.5. Incompatible materials
Substances to avoid
Acid
Oxidising agent, strong

10.6. Hazardous decomposition products
Concerning possible decomposition products see section 5.

Thermal decomposition
Remark No decomposition if used as directed.

! Additional information
As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

! SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

<table>
<thead>
<tr>
<th></th>
<th>Value/Validation</th>
<th>Species</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 acute oral</td>
<td>&gt; 2000 mg/kg</td>
<td>rat</td>
<td>OECD 401</td>
<td>Information concerns to main component.</td>
</tr>
<tr>
<td>LD50 acute dermal</td>
<td>&gt; 2000 mg/kg</td>
<td>rabbit</td>
<td>OECD 402</td>
<td>Information refers to main component.</td>
</tr>
<tr>
<td>LC50 acute inhalation</td>
<td>&gt; 20 mg/l (4 h)</td>
<td>rat</td>
<td></td>
<td>Information concerns to main component.</td>
</tr>
<tr>
<td>Skin irritation</td>
<td>low irritant effect - not necessary to label</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye irritation</td>
<td>irritant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>No known sensitization.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Experiences made from practice
May be absorbed through the skin. Repeated and prolonged skin contact may cause defatting and irritation. Concentrations substantially above MAK-value may effect narcotic. After swallowing irritations in the mouth, pharynx, esophagus, gastrointestinal tract. After Resorption large quantities: Drowsiness, dizziness, cramps, and in certain circumstances narcosis.

Additional information
The product should be handled with the care usual when dealing with chemicals. Further hazardous properties cannot be excluded.

! SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

<table>
<thead>
<tr>
<th>Value</th>
<th>Species</th>
<th>Method</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>LC50 15300 mg/l (96 h)</td>
<td>Pimephales promelas</td>
<td>Information refers to main component.</td>
</tr>
<tr>
<td>Daphnia</td>
<td>EC50 &gt; 10000 mg/l (48 h)</td>
<td>Daphnia magna</td>
<td>Information refers to main component.</td>
</tr>
<tr>
<td>Algae</td>
<td>EC50 275 mg/l (3 d)</td>
<td>Chlorella vulgaris</td>
<td>OECD 201 Information refers to main component.</td>
</tr>
<tr>
<td>Bacteria</td>
<td>EC50 5800 mg/l (4 h)</td>
<td>Paramecium caudatum</td>
<td>Information refers to main component.</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Elimination rate</th>
<th>Method of analysis</th>
<th>Method</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological</td>
<td></td>
<td></td>
<td>Main component readily degradable</td>
</tr>
<tr>
<td>degradability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential
No information available.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
No information available.

12.6. Other adverse effects

General regulation
Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product
There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender.
Recommendations for packaging
Disposal according to official regulations. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent
water

General information
Allocation of the waste number has to be done according to the EWC directive industry- and process-specific.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th></th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA-DGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>1170</td>
<td>1170</td>
<td>1170</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>ETHANOL (ethanol)</td>
<td>ETHANOL (ethanol)</td>
<td>Ethanol solution (ethanol)</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user
No information available.

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

Land and inland navigation transport ADR/RID
Hazard label(s) 3
tunnel restriction code D/E
Classification code F1

Marine transport IMDG
MARINE POLLUTANT

SECTION 15: Regulatory information

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

National regulations
Water hazard class 2 following VvVwS hazardous to water

Decree for case of interference/remarks
Quantity limits according to Hazardous Incident Ordinance must be observed.
15.2. Chemical Safety Assessment
No information available.

SECTION 16: Other information

Recommended uses and restrictions
National and local regulations concerning chemicals shall be observed.

Further information
The national special regulations have to be implemented by each user their own responsibility!
The information contained herein is based on the state of our knowledge. It characterizes the product with
regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the
product.
Please note: Our Material Safety Data Sheets have been prepared in accordance with EU directives,
WITHOUT taking into account the specific national regulations for handling hazardous materials and
chemicals.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 2.0

Sources of key data used
Data sheets of the suppliers.
European Chemicals Agency (ECHA)
Federal Environment Agency (water hazard classes)

H225  Highly flammable liquid and vapour.
H226  Flammable liquid and vapour.
H302   Harmful if swallowed.
H315   Causes skin irritation.
H317   May cause an allergic skin reaction.
H318   Causes serious eye damage.
H319   Causes serious eye irritation.
H332   Harmful if inhaled.
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.
H412   Harmful to aquatic life with long lasting effects.