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

1.1. Product identifier

Pyrinex 250 CS

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

Recommended Use: Insecticide
Uses advised against: No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address: ADAMA SOUTH AFRICA (PTY) LTD
21 Viben Street
Brankenfell
7560

For further information, please contact
Email address: msds@mcw.co.il

1.4. Emergency telephone number

Emergency Telephone: +27 82 331 6463
+27 21 982 1460

Section 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification of the product is based on the coformulants listed in section 3
R43 - N; R50-53

Full text of R-phrases: see section 16

2.2. Label elements

The product is classified and labeled in accordance with Directive 1999/45/EC

Hazard symbols

Xi - Irritant
N - Dangerous for the environment
R-Phrases
R43 - May cause sensitization by skin contact
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-Phrases
S2 - Keep out of the reach of children
S24 - Avoid contact with skin
S28 - After contact with skin, wash immediately with plenty of soap and water
S36/37 - Wear suitable protective clothing and gloves
S60 - This material and its container must be disposed of as hazardous waste

2.3. Other hazards Other Information

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>CAS No</th>
<th>EC No</th>
<th>Index No</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Classification according to 67/548/EEC</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>22 - 25</td>
<td>2921-88-2</td>
<td>220-864-4</td>
<td>015-084-00-4</td>
<td>Acute Tox. 3 (H301) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>T; R25 N; R50-53</td>
<td>-</td>
</tr>
<tr>
<td>Polyalkyleneoxide modified</td>
<td>1 - 2</td>
<td>27306-78-1</td>
<td>-</td>
<td>-</td>
<td>Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)</td>
<td>Xn;R20 Xi;R36 N; R51/53</td>
<td>-</td>
</tr>
<tr>
<td>Heptamethyltrisiloxane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bis(2,2,6,6-tetramethyl-4-piperidyl)</td>
<td>&gt;0.1</td>
<td>52829-07-9</td>
<td>258-207-9</td>
<td>-</td>
<td>Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)</td>
<td>Xi; R36 N; R51-53</td>
<td>-</td>
</tr>
<tr>
<td>sebacate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of R-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of 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
Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.
Self-protection of the first aider

Use personal protective equipment as required.

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

Symptoms

None known

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

Note to physicians

Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

No information available.

5.2. Special hazards arising from the substance or mixture

No specific hazard known.

5.3. 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

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. Avoid contact with eyes and skin.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Other Information

See also section 8,13

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Advice on safe handling
Use personal protective equipment as required. Use only with adequate ventilation.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. 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

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>STEL: 0.6 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>S¹</td>
<td>TWA: 0.2 mg/m³</td>
</tr>
<tr>
<td>2921-88-2</td>
<td>Skin</td>
<td>TWA: 0.2 mg/m³</td>
<td>S¹</td>
<td>TWA: 0.2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>TWA: 0.1 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>S¹</td>
<td>TWA: 0.2 mg/m³</td>
</tr>
<tr>
<td>2921-88-2</td>
<td>Skin</td>
<td>TWA: 0.2 mg/m³</td>
<td>S¹</td>
<td>TWA: 0.2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>Skin</td>
<td>Wealth</td>
<td>NDSCh: 0.6 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
</tr>
<tr>
<td>2921-88-2</td>
<td>STEL: 0.4 mg/m³</td>
<td>TWA: 0.2 mg/m³</td>
<td>Skin</td>
<td>STEL: 0.6 mg/m³</td>
<td>Skin</td>
</tr>
</tbody>
</table>

Derived No Effect Level (DNEL)  No information available
Predicted No Effect Concentration (PNEC)  No information available.

8.2. Exposure controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment
Eye/face protection
Tight sealing safety goggles.

Body Protection
Suitable protective clothing.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Environmental exposure controls
Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

See Section 12 for more information

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute toxicity
Chronic toxicity

Germ cell mutagenicity
Chemical Name
Chlorpyrifos : Not classified

Carcinogenicity
Chemical Name
Chlorpyrifos : Not Carcinogenic

Reproductive toxicity
Chemical Name
Chlorpyrifos : Not toxic for the reproductive system

STOT - single exposure
Chemical Name
Chlorpyrifos : No information available

STOT - repeated exposure
Chemical Name
Chlorpyrifos : No information available

Aspiration hazard
Chemical Name
Chlorpyrifos : No information available

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity

Aquatic toxicity

<table>
<thead>
<tr>
<th>Values</th>
<th>Species</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish 96-hour LC50 mg/l</td>
<td>110</td>
<td>Rainbow trout</td>
<td>OECD 203</td>
</tr>
<tr>
<td>Crustacea 48-hour EC50 mg/l</td>
<td>0.000175</td>
<td>Daphnia magna</td>
<td>OECD 202</td>
</tr>
<tr>
<td>Algae 72-hour EC50 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other plants EC50 mg/l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Terrestrial Toxicity

Birds Oral LD50 mg/kg
Chemical Name
Chlorpyrifos : 476

Bees Oral LD50 µg/bee
Chemical Name
Chlorpyrifos : 0.25

12.2. Persistence and degradability

Abiotic Degradation
Water DT50 days

<table>
<thead>
<tr>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chemical Name
Chlorpyrifos : 16 - 35 pH 7; 25 °C

Soil DT50 days
Chemical Name
Chlorpyrifos : 13 - 22

Biodegradation
Chemical Name
Chlorpyrifos : Not readily biodegradable

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Partition Coefficient</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n-octanol/water) Log Pow</td>
<td>4.76</td>
<td>OECD 107</td>
<td></td>
</tr>
</tbody>
</table>

Bioconcentration factor (BCF)
Chemical Name
Chlorpyrifos : 1374 No bioaccumulation potential

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Adsorption/Desorption</th>
<th>Values</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>2785 - 31000</td>
<td>OECD 106</td>
<td>Koc</td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB

12.6. Other adverse effects
No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Improper disposal or reuse of this container may be dangerous and illegal.

Other Information
Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

14.1 UN/ID No 3082
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpyrifos)
14.3 Hazard Class 9
14.4 Packing Group III
14.5 Marine pollutant Yes
14.6 Special precautions for user
Section 15: REGULATORY INFORMATION

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

15.2. Chemical safety assessment
A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required. A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009.

Section 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
R20 - Harmful by inhalation
R25 - Toxic if swallowed
R36 - Irritating to eyes
R43 - May cause sensitization by skin contact
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 20-May-2014

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

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