SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Annex II

Revision Date 20-May-2014 Publish Date 26-May-2014 Version 1

Product No INS00008-27 R-6850.EU / MCW-3031

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 Uses advised against	Insecticide No information available
1.3. Details of the supplier of the saf	ety 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 ${\sf R43}$ - ${\sf N;}{\sf R50-53}$

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

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

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

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Chlorpyrifos		STEL: 0.6 mg/m ³	TWA: 0.2 mg/m ³	S*	TWA: 0.2 mg/m ³
2921-88-2		TWA: 0.2 mg/m³ Skin		TWA: 0.1 mg/m ³	
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Chlorpyrifos		TWA: 0.1 mg/m ³		TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³
2921-88-2				STEL: 0.6 mg/m ³	Skin
				Skin	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Chlorpyrifos	Skin	Skin	NDSCh: 0.6 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³
2921-88-2	STEL 0.4 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	Skin	STEL: 0.6 mg/m ³
	TWA: 0.2 mg/m ³		Skin	STEL: 0.6 mg/m ³	Skin

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available. **(PNEC)**

8.2. Exposure controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment Eye/face protection Body Protection	Tight sealing safety goggles. 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

Property_	Values	Method	<u>Remarks</u>
Appearance Physical state	: Liquid		

Pyrinex 250 CS - INS00008-27

Color	: light yellow		
Odor	: Odorless		
Odor threshold	: No data available		
рН	: 7.0 - 8.5	CIPAC MT 75.2	solution (1 %)
Melting point/freezing point °C	: No data available		
Boiling point/boiling range °C	: No data available		
Flash point °C	: No data available	EEC A.9	aqueous solution
Evaporation rate	: Not Applicable		
Flammability (solid, gas)	: Not Applicable		
Upper/lower flammability or	: No data available		
explosive limits			
Vapor pressure kPa	: No data available		
Vapor density	: No data available		
Relative density	: 1.08 - 1.10	CIPAC MT 3.3.2	
Solubility(ies) mg/l	: No data available		
Partition Coefficient	:		See Section 12 for more
(n-octanol/water) Log Pow		550 A 45	information
Autoignition temperature °C	: 595	EEC A.15	
Decomposition temperature °C			
Kinematic viscosity mm2/s 40 °C	: 22.7 - 186.4	OECD 114	
Explosive properties	: Not an explosive		
Oxidizing properties	: No		
0.2 Other information			
9.2. Other information			Not Applicable
Bulk density g/ml Surface tension mN/m	Not Applicable		
Minimum ignition energy (MIE) mJ	•		

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

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Pyrinex 250 CS - INS00008-27

		<u>Values</u> > 2000	<u>Species</u> Rat	Method OECD 401	Remarks	
Oral LD50 mg/kg		> 2000	Rat	OECD 401 OECD 402		
Dermal LD50 mg/kg Inhalation LC50 mg/l/4h		> 2000	Rai	0ECD 402	Not Applicable	
Skin corrosion/irritation	:	Non irritating to the skin	Rabbit	OECD 404	Not Applicable	
		Non-irritating to the skin Not classified	Rabbit	OECD 404 OECD 405		
Serious eye damage/eye irritation	-			OECD 405 OECD 406		
Respiratory/skin sensitization	:	Skin sensilizer	Guinea pig	0ECD 406		
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 Fish 96-hour LC50 mg/l Crustacea 48-hour EC50 mg/l Algae 72-hour EC50 mg/l Other plants EC50 mg/l	<u>Values</u> : 110 : 0.000175 : :	<u>Species</u> Rainbow trout Daphnia magna	Method OECD 203 OECD 202	<u>Remarks</u> Not available Not available
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	<u>Values</u>		<u>Method</u>	<u>Remarks</u>

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			
Partition Coefficient (n-octanol/water) Log Pow Chemical Name	<u>Values</u>	Method	<u>Remarks</u>
Chlorpyrifos	: 4.76	OECD 107	
Bioconcentration factor (BCF) Chemical Name			
Chlorpyrifos	: 1374		No bioaccumulation potential
<u>12.4. Mobility in soil</u>			
Adsorption/Desorption Chemical Name	Values_	<u>Method</u>	<u>Remarks</u>
Chlorpyrifos	: 2785 - 31000	OECD 106	Koc
12.5 Posults of PPT and vPvP as	accoment		

<u>12.5. Results of PBT and vPvB assessment</u> 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	
14.5 Marine pollutant	Yes
14.6 Special precautions for user	

RID/ADR

IBC Code

14.1 UN/ID No 14.2 Proper shipping name 14.3 Hazard Class 14.4 Packing Group 14.5 Environmental hazard 14.6 Special precautions for user	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpyrifos) 9 III Yes
<u>ICAO/IATA</u> 14.1 UN/ID No	3082

14.2 Proper shipping nameENVIRONMI14.3 Hazard Class914.4 Packing GroupIII14.5 Environmental hazardYes

14.7 Transport in bulk according to Not Applicable

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpyrifos) 9 III Yes

14.6 Special precautions for user

Annex II of MARPOL 73/78 and the

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