SAFETY DATA SHEET (SDS)	
TITLE:	**HEXYTHIAZOX 250 SC**

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Product Name	:	AG HEXYTHIAZOX 250 SC
Common Name	:	Hexythiazox 250 g/L SC
CAS No.	:	78587-05-0
Chemical Name (IUPAC)	:	(4*RS*, 5*RS*)-5-(4-chlorophenyl)-*N*-cyclohexyl-4-methyl-2-oxo-1.3-thiazolidine-3-carboxamide
Molecular Weight	:	352.9

1.2 Relevant identified uses of the substance: Non-systemic acaricide.

1.3 Details of the Manufacturer / Supplier of the safety data sheet:

Supplier	AGROMEC SARL P.O.Box: 462 Jounieh, Lebanon
Tel	+961 9 226874
E-mail	agromec@agromec-international.com
Webpage	www.agromec-international.com

1.4 Emergency Phone Number (24 hours)

+961 3 980599

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008 (CLP).

1272/2008/EU	
Pictograms / Signal word code (s)	**Hazard Statement Code (s)**
GHS09, Wng	H400, H410

For full text of H-phrases: see section 2.2.1

67/548/EEC (DSD)		
Classification and Indication of Danger (s)	**R-Phrases**	**S-Phrases**
N	R 50/53	S 60/61

For full text of R-phrases and S-phrases: see section 2.2.2

2.1.2 The most important adverse effects

The most important adverse human health effects: Health Hazards: harmful if swallowed or if inhaled, may cause irritation by skin contact.

The most important adverse environmental effects: very toxic to aquatic organisms, with long lasting effects in the aquatic environment.

2.1.3 According to 1272/2008/EU REGULATION

Pictograms / Signal word code (s)

GSH02

GHS06

GHS05

GHS09

Hazard Statement code (s)

H228	:	Flammable solid.
H302	:	Harmful if swallowed
H311	:	Toxic in contact with skin
H315	:	Causes skin irritation
H318	:	Causes serious eye damage
H335	:	May cause respiratory irritation
H400	:	Very toxic to aquatic life
H410	:	Very toxic to aquatic life with long lasting effects

2.1.4 According to 67/548/EEC REGULATION

Indication (s) of Danger :

F - Flammable

Xn – Harmful

N – Dangerous for the environment

C - Corrosive

Risk phrases

R 11	:	Highly Flammable
R 21/22	:	Harmful by inhalation and in contact with skin .
R 50/53	:	Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R 37/38	:	Irritating to eyes and skin
R 41	:	Risk of serious damage to eyes

Safety phrases

S 60/61	:	This material and its container must be disposed of as hazardous waste /Avoid release to the environment. Refer to special instructions/Safety data sheets.

2.2 Other hazards

Specific concentration Limits and M factors (for active substance): N/A

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name / CAS No	% w/v	Risk and Safety Phrases (67/548/EEC)	Hazard Symbol (67/548/EEC)	Hazard Pictograms (1272/2008/EC)	Hazard Statements (1272/2008/EC)
Hexythiazox / 78587-05-0	25	R 50/53 S 60, 61	N	GHS09	H400, H410
Inert materials	to 100%				

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 General information

Consult a physician. Show this safety data sheet to the doctor in attendance.

4.1.2 In case of inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.1.3 In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

4.1.4 In case of eyes contact

Flush eyes with water as a precaution.

4.1.5 In case of ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.1.6 Note to physician

No specific antidote. Treat symptomatically.

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

The most important adverse human health effects: Health Hazards: harmful if swallowed or if inhaled, may cause irritation by skin contact

5.0 FIRE – FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : CO_2, water, foam, dry chemical powder or spray.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Combustion or thermal combustion will evolve toxic and irritant vapors

5.3 Advice for fire-fighters

Move containers from fire area if possible. Fight fire from maximum distance. Stay away from storage tank ends. Contain fire control water for later disposal. Do not scatter material, extinguish only if flow can be stopped. Use flooding amounts of water as a fog, solid streams may be ineffective. Cool containers with flooding amounts of water as far a distance as possible. Use water spray to absorb toxic vapours. Avoid breathing toxic vapours. Keep upwind. Consider evacuation of downwind area if material is leaking.

5.4 Fire and Explosion Hazards:

Fire may produce irritating or poisonous vapours mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 Personal precautions

Appropriate protective equipment must be worn when handling a spill of this material. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.

6.2 Environmental precautions

Do not discharge into drains or rivers. Do not allow to enter soil, waterways or waste water canal. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations

6.3 Methods and material for containment and cleaning up

Keep spectators away. Avoid breathing vapor. Absorb spilled material with sawdust, clay, etc. and transfer to suitable containers for recovery or disposal. Keep dust to a minimum.

6.3.1 Other information

N/A

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information

N/A

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

7.1.1 Protective measures

Harmful by skin or eye contact, inhalation or ingestion. Avoid contact with eyes and skin, and inhalation of dust. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. Protect against physical damage. Use non-sparking type tools and equipment, including explosion proof ventilation. Do not contaminate lakes, streams, and ponds.

7.1.2 Advice on general occupational by hygiene

Avoid contact with eyes, skin or clothing. Do not breathe spray mist. When using, do not eat, drink, or smoke. Wash hands and exposed skin before meals and afterwork. Wash out container thoroughly and dispose of safely.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions	:	Store in a closed, original container in a dry, cool covered warehouse in original, well-labelled containers. Keep containers tightly closed. Store away from food, feedstuffs, fertilisers, seed and agricultural chemicals. Keep away from children and animals. Keep away from heat & sources of ignition. Keep away from combustible material. Keep in an area equipped with sprinklers. No smoking. Local regulations should be complied with.
Further information on storage conditions	:	N/A

8.0 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational exposure limits

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

8.1.2 Additional exposure limits under the conditions of use: N/A

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations. If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

8.2.2 Personal protection equipment

An approved respirator suitable for protection from dusts and mists of pesticides is required. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

8.2.3 Eye / Face protection

The use of safety goggles is recommended. Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

8.2.4 Skin Protection

Employee must wear appropriate protective (impervious) clothing and equipment to prevent skin contact with the substance. Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

8.2.5 Respiratory protection

Ensure good ventilation. For maximum protection, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

8.2.6 Other information

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining personal protection equipment. Keep and wash personal protection equipment separately from other laundry.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	powder
Odor	:	odorless
Colour	:	Off-white

Flash point (°C)	:	N/A
pH value (1 % emulsion in water)	:	N/A
Density	:	N/A
Oxidizing properties	:	N/A
Explosive properties	:	N/A
Auto-ignition temperature	:	N/A
Decomposition temperature	:	N/A

9.2 Other information

N/A

10.0 STABILITY AND RELIABILITY

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under the normal handling and storage coditions.

10.3 Possibility of hazardous reactions

Thermal decomposition may emit toxic fumes of carbon and nitric oxides and organic sulfides.

10.4 Conditions to avoid

Avoid extreme heat and exposure to light

10.5 Incompatible materials

Incompatible with acids and compounds which are alkaline in reaction.

10.6 Hazardous decomposition products

The substance decomposes on burning, and producing toxic and corrosive fumes.

10.7 Hazard Polymerization

Will not occur.

11.0 TOXICOLOGICAL INFORMATION

11.1Information on toxicological effects (data on active ingredient)

Acute toxicity

- Inhalation : LC50 (rat) >2 mg/l of air over 4 hours
- Dermal : LD50 (rat) > 5000 mg/kg
- Oral : LD50 (rat) > 5000 mg/kg

Skin corrosion/Irritation : Mid irritant

Eye damage/irritation	:	Mild irritant
Respiratory or skin sanitization	:	N/A
Repeated exposure	:	N/A

Other information

Germ cell mutagenicity	:	Not mutagenic
Carcinogenicity	:	N/A
Reproductive toxicity	:	N/A
STOT- single exposure	:	N/A
STOT- repeated exposure	:	N/A
Aspiration hazard	:	N/A

12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

12.1.1 Aquatic Toxicity

The reported LC50 values of the compound are >300 mg/ℓ in rainbow trout and 11.6 mg/ℓ (48 h) in bluegill sunfish.

12.1.2 Avian Toxicity

Bees: Not toxic.

Birds: The reported oral LD50 values for the compound are >2510 mg/kg in mallards, >5000 mg/kg in bobwhite quail.

Fish: See section 12.1.1.

12.1.3 Environmental Fate

. Soil and water: DT50 in clay loam at 15 oC is 8 d. In soil, undergoes oxidation to the corresponding hydroxyl and carbonyl compounds..

12.1.4 Persistence and degradability

N/A.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

. See 13.2.

13.2 Product / Packaging disposal

13.2.1 Product waste disposal

Landfill in government approved sites. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

13.2.2 Packing waste disposal

Emptied containers retain product residues. Triple rinsing or preferably pressure rinsing containers with water. Add the rinsing to the spray tank. DO NOT dispose of undiluted chemicals on site. Observe all labeled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Non-combustible containers must first be triple rinsed with water, then punctured and transported to a scrap metal facility for recycling or disposal.

14.0 TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

UN No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexythiazox)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

14.2 Sea transport (IMDG-Code/GGVSee)

UN-No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexythiazox)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

14.3 Air transport (ICAO-IATA/DGR)

UN No	:	3077
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexythiazox)
Class(es)	:	9
Packing group	:	III
Hazard label(s)	:	9, marine pollutant

15.0 REGULATORY INFORMATION

15.1 Risk and safety phrases in accordance with the Directive 2001/58/EC

Hazard Symbol	See section 2.2.2 and 2.1.1
R-Risk Phrases	See section 2.2.2 and 2.1.1
S- Safety Phrases	See section 2.2.2 and 2.1.1

15.2Hazard and Precautionary statements in accordance with the regulation 1272/2008/EC

Pictograms and Signal Word Code(s)	See section 2.2.1 and 2.1.1
Hazard Statement Code (s)	See section 2.2.1 and 2.1.1

16.0 OTHER INFORMATION

16.1 Hazard symbols mentioned in section 3 in accordance with the Directive 2001/58/EC

See section 2.

16.2 Risk phrases mentioned in section 3 in accordance with the Directive 2001/58/EC:

See section 2.

16.3 Safety phrases mentioned in section 3 in accordance with the Directive 2001/58/EC:

See section 2.

16.4 Pictograms and Signal Word Code(s)mentioned in section 3 in accordance with the regulation 1272/2008/EC

See section 2.

16.5 Hazard statements mentioned in section 3 in accordance with the regulation 1272/2008/EC:

See section 2

16.6 Training advice: N/A

16.7 Disclaimer

The above information contained herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.

16.8 Further Information

The information contained herein relates only to the specified material identified. AGROMEC, believes that such information is accurate and reliable as of the data of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. AGROMEC urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

This material safety data sheet adopts the provisions of the European Commission Directive 2001/58/EC and Regulations 1272/2008 (CLP) and 453/2010 (REACH).