



SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name	Movento® 240 SC Insecticide
Other names	none
Product code (UVP)	06424384
Chemical Group	Tetramic acid cyclic ketoenole
Recommended use	Insecticide
Chemical Formulation	Suspension concentrate (=flowable concentrate)(SC)
Company	Bayer Cropscience Pty Ltd -ABN 87 000 226 022 391-393 Tooronga Road, East Hawthorn Victoria 3123, Australia
Telephone	(03) 9248 6888
Technical Information Service	1800 804 479
Facsimile	(03) 9248 6800
Website	www.bayercropscience.com.au
Emergency telephone no.	1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE

DANGEROUS GOODS

Hazardous classification	Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrases(s)	R36 - Irritating to eyes. R43 - May cause sensitisation by skin contact. R62 - Possible risk of impaired fertility. R63 - Possible risk of harm to the unborn child.
S-phrases(s)	See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification	"Dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule)	Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
 Spirotetramat 240 g/l

Chemical Name	CAS-No.	Concentration [%]
Spirotetramat	203313-25-1	22.40
Glycerine	56-81-5	10.00
Mixture of 5-Chlor-2-methyl-3(2H)-isothiazolon and 2-Methyl-2H-isothiazol-3-on	55965-84-9	0.08
Other ingredients (non-hazardous) to		



100%		
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SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

General advice

Move out of dangerous area. Place and transport victim in stable position (lying sideways).
Remove contaminated clothing immediately and dispose of safely.

Inhalation

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

Notes to physician

Symptoms

Systemic:, To date no symptoms are known.

Treatment

Treat symptomatically.
In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray
Carbon dioxide (CO₂)
Foam
Sand

Hazards from combustion products

In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Carbon monoxide (CO)
Nitrogen oxides (NO_x)

Precautions for fire-fighting

Wear self-contained breathing apparatus and protective suit.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Whenever possible, contain fire-fighting water by diking area with sand or earth.
Do not allow run-off from fire fighting to enter drains or water courses.



Hazchem Code •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
Use personal protective equipment.
Keep unauthorized people away.

Environmental precautions

Contain contaminated water and fire fighting water.
Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Clean contaminated floors and objects thoroughly, observing environmental regulations.
Keep in suitable, closed containers for disposal.

Reference to other sections

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

Handling

Hygiene measures

Avoid contact with skin, eyes and clothing.
Keep working clothes separately.
Wash hands immediately after work, if necessary take a shower.
Remove soiled clothing immediately and clean thoroughly before using again.
Garments that cannot be cleaned must be destroyed (burnt).

Storage

Requirements for storage areas and containers

Keep out of the reach of children.
Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in a place accessible by authorized persons only.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Glycerine (Mist.)	56-81-5	10 mg/m ³ (TWA)	08 2005	AU OEL
Glycerine (Inspirable dust.)	56-81-5	10 mg/m ³ (TWA)	08 2005	AU OEL

For further details on the Occupational Exposure Standards, see Section 16.

Biological limit values



none

Personal protective equipment - End user

Respiratory protection	AS/NZS 1715/1716 approved respirator
Hand protection	Elbow-length PVC or nitrile gloves
Eye protection	Goggles
Skin and body protection	Cotton overall buttoned to the neck and wrist

Engineering Controls

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	suspension
Colour	white to light beige
Odour	weak, characteristic

Safety data

pH	4.0 - 5.0 at 100 % (23 °C)
Flash point	> 100 °C No flash point - Determination conducted up to the boiling point.
Ignition temperature	ca. 415 °C
Upper explosion limit	no data available
Lower explosion limit	no data available
Vapour pressure	no data available
Relative vapour density	no data available
Density	ca. 1.07 g/cm ³ at 20 °C
Water solubility	miscible
Partition coefficient: n-octanol/water	no data available
Surface tension	44 mN/m at 25 °C Determined in the undiluted form.
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113



Other information Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Conditions to avoid	no data available
Materials to avoid	Strong bases Strong acids Strong oxidizing agents
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Hydrogen cyanide (hydrocyanic acid) Carbon monoxide Nitrogen oxides (NO _x)
Thermal decomposition	Stable under normal conditions.
Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation	May be harmful if inhaled.
Skin	Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin and clothing.
Eye	May cause mild irritation to eyes. Avoid contact with eyes.
Ingestion	Harmful if swallowed. Do not take internally.
Acute oral toxicity	LD50 (rat) > 2,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 3.013 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
Acute dermal toxicity	LD50 (rat) > 4,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Sensitising (guinea pig) OECD Test Guideline 406, Buehler test
Chronic toxicity	Spirotetramat did not cause specific target organ toxicity in experimental animal studies.



Assessment Mutagenicity

Spirotetramat was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Spirotetramat was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Spirotetramat caused male reproductive toxicity in the presence of general toxicity in the rat at very high experimental dose levels. There were no effects on male fertility in mice and dogs. The reproductive toxicity seen with Spirotetramat is due to an overwhelmed elimination capacity at high doses. The high dose levels needed for this effect cannot be achieved even in a worst case exposure scenario.

Assessment developmental toxicity

Spirotetramat caused developmental toxicity only at dose levels toxic to the dams. Spirotetramat caused a delayed foetal growth, an increased incidence of variations.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 7.75 mg/l Exposure time: 96 h
Toxicity to fish	LC50 (<i>Lepomis macrochirus</i> (Bluegill sunfish)) 2.2 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient spirotetramat.
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) \geq 42.7 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient spirotetramat.
Toxicity to aquatic plants	IC50 (<i>Pseudokirchneriella subcapitata</i>) 13.4 mg/l Growth rate Exposure time: 72 h
Toxicity to aquatic plants	IC50 (<i>Pseudokirchneriella subcapitata</i>) 8.15 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient spirotetramat.
Toxicity to other organisms	LD50 (<i>Colinus virginianus</i> (Bobwhite quail)) $>$ 2,000 mg/kg The value mentioned relates to the active ingredient spirotetramat.
Additional ecological information	No other effects to be mentioned.
Biodegradability	Readily biodegradable. The value mentioned relates to the active ingredient spirotetramat.
Stability in water	DT50: 9 d at 25 °C, pH: 7.0. The value mentioned relates to the active ingredient spirotetramat.



	DT50: 13 d at 20 °C, pH: 7.0. The value mentioned relates to the active ingredient spirotetramat.
Stability in soil	. Slightly mobile in soils The value mentioned relates to the active ingredient spirotetramat.
Bioaccumulation	no data available
Additional Environmental Information	no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number	3082
Class	9
Subsidiary Risk	None
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROTETRAMATE SOLUTION)
Hazchem Code	•3Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG

UN number	3082
Class	9
Subsidiary Risk	None
Packaging group	III
EmS	F-A , S-F
Marine pollutant	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SPIROTETRAMATE SOLUTION)

IATA

UN number	3082
Class	9
Subsidiary Risk	None
Packaging group	III
Environm. Hazardous Mark	YES
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



(SPIROTETRAMATE SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 61864
See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information Movento® is a registered trademark of the Bayer Group.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Further details on the Occupational Exposure Standards mentioned in Section 8:

CEILING: Ceiling Limit Value

OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

END OF SDS