



SAFETY DATA SHEET

RODEO SL

Issue Date: 22.02.2016

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: Rodeo SL
Chemical name: Metalaxyl-M
CAS Nos.: 70630-17-0

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

Identified uses: Fungicide for agricultural use

Details of the supplier of the safety data sheet

Almandine Corporation SA
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6300 Zug
Switzerland
Tel: +44 20 8995 8391
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Email: almuk@almandine.com
Formulation site: Huddersfield
West Yorkshire, UK

Emergency telephone number

Tel: +44 20 8995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri, UK)

SECTION 2. HAZARDS IDENTIFICATION

Acute tox (oral) 4
Eye Irrit. 2

Classification and Label Elements:



Pictogram(s):

Signal word: Warning

Hazard statement(s):

H302: Harmful if swallowed
H319: Causes serious eye irritation

Precautionary statement(s):

P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/ eye protection/ face protection.
P301+P312: IF SWALLOWED: call a POISON CENTER or doctor if you feel unwell.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

Name	CAS N°	Conc. (%)	Signal word	H Statement(s)
Metalaxyl-M	70630-17-0	48	Danger	H302, H318
Anionic surfactant	mixture	5-10	Danger	H319, H315, H318

See Sections 2 and 16 for full H statements.

SECTION 4. FIRST AID MEASURES

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention if required.

Skin contact: Remove immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water to minimise contact with skin. Wash contaminated clothing before wearing again.

Eye contact: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart for at least 15 minutes. Obtain immediate medical attention.

Ingestion: If swallowed seek medical advice immediately and show the container, label or this Data sheet, if possible. Provided the patient is conscious, wash out mouth with water. Do not induce vomiting.

Medical Advice: There is no specific antidote, treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray or alcohol resistant foam. Keep unexposed containers cool with water spray. Water jet is not recommended.

Protective equipment: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

Under fire conditions: May produce dense black smoke containing toxic and irritant vapours.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure suitable personal protection during removal of spillages (see section 8). Stop spills if safe to do so.

Clean up methods: Absorb spill with a non combustible absorbent material, such as sand, earth or diatomaceous earth. Shovel into well labelled, sealed, suitable containers.
For large spills it may be necessary to dyke spill area to prevent contamination of drains and waterways.

Environmental precautions: Do not flush into water sources, drains or sewage systems. If product enters sewage or contaminates water sources, inform the relevant authorities.



SECTION 7. HANDLING AND STORAGE

- Handling:** Use PPE as outlined in section 8. Do not eat drink or smoke while using this product.
- Storage:** Keep original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeds. Avoid storing at freezing temperatures.
- Storage Life:** Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure limits:

Hazardous ingredient: Metalaxyl-M: 10mg/m³ TWA 8h

Exposure controls: Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.

Personal protective equipment:

Eye/face protection: Wear face shield of goggles.

Skin/hand protection: Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots. Chemical resistant gloves should be used. Suitable materials include: nitrile rubber.

Respiratory protection: If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours.

Wash hands and exposed skin before meals and after work.
Wash all protective clothing thoroughly after use, especially the inside of gloves.
When using do not eat, drink or smoke.
Keep away from food, drink and animal feed stuffs.
Keep out of the sight and reach of children.

SECTION 9. PHYSICAL / CHEMICAL PROPERTIES

- a) Appearance: Yellow to brown viscous liquid
- b) Odour: Ketone-like odour
- c) Odour threshold: None set
- d) pH: 6 – 7 (1% dilution)
- e) Melting point/freezing point: not determined
- f) Boiling point/boiling range: Decomposes before boiling (tech.)
- g) Flash point: Does not flash
- h) Evaporation rate: Not measured



- i) Flammability (solid/gas): Not flammable
- j) Upper/lower flammability or explosive limits: None set
- k) Vapour pressure: 3.3×10^{-3} Pa (25°C) (tech.)
- l) Vapour density: 3.5×10^{-5} Pa x m³ x mol⁻¹ (25°C) (tech.)
- m) Relative density: 1.04 – 1.15 g / cm³
- n) Solubility: Soluble in water (tech.)
- o) Partition coefficient: Log P_{ow} 1.71 (pH 7, 20°C) (tech.)
- p) Auto-ignition temperature: Not determined
- q) Decomposition temperature: Not determined
- r) Viscosity: Not determined
- s) Explosive properties: Not explosive
- t) Oxidising properties: Not an oxidiser

SECTION 10. STABILITY AND REACTIVITY

Hazardous decomposition

Products: Combustion or thermal decomposition will evolve toxic and irritant vapours. Hazardous polymerisation does not occur. Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Oral toxicity: LD₅₀ rat: >300-2000 mg/kg (GHS Cat 4)

Dermal toxicity: LD₅₀ rat: >2000-5000 mg/kg (GHS Cat 5)

Inhalation toxicity: >5.21 mg/L (rat, 4 h)

Skin irritation: Non-irritant

Eye irritation: Causes serious eye irritation

Skin sensitisation: Not a skin sensitiser

Not carcinogenic, genotoxic mutagenic or a reproductive toxin

Long term exposure: No long term risks to man are associated with the normal handling and use of this material.

WHO toxicity classification: II, moderately hazardous

SECTION 12. ECOLOGICAL INFORMATION

(based on tech. material)

Bird toxicity: LD₅₀ Bobwhite quail 981 mg/kg



Fish toxicity:	LC ₅₀ 96 h Rainbow trout	>100 mg/L
Daphnia toxicity:	EC ₅₀ 48 h <i>Daphnia magna</i>	>100 mg/L
Algal toxicity:	EC ₅₀ <i>Scenedesmus subspicatus</i> 72 h	36 mg/L
Other organisms:	Metalaxyl-M is non-toxic to bees.	
Chronic (long-term) toxicity:		
Fish:	NOEC 28-d Rainbow trout	100 mg/L
Daphnia:	NOEC 21-d <i>Daphnia magna</i>	25 mg/L

Persistence and degradability: Non persistent in water. Moderately persistent in soil.

Bioaccumulative potential log P_{ow}: 1.71 (pH 7, 20°C)
(Low potential for bioaccumulation).

Mobility in soil: High mobility

SECTION 13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Empty containers should be triple-washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

SECTION 14. TRANSPORTATION INFORMATION

Not classified for transport.

SECTION 15. REGULATORY INFORMATION

No additional regulatory information.

SECTION 16. OTHER INFORMATION

Additional relevant H-statements:

These H statements are for hazardous components in the product but are not at levels that require risk statements. They provide additional information on risks.

H318	Causes serious eye damage
H315	Causes skin irritation

Time weighted average (TWA) is the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's treatment of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.

Sections 9, 11 and 12 based on available EU and own data.
Classification based on studies (tox)