LONGWIND
CROPSCIENCE USA LLC

www.longwind-us.com

SAFETY DATA SHEET

This Safety Data Sheet (SDS) complies with the requirements of the U.S. Federal Occupational Safety and Health Administration Hazard Communication 29 CFR 1910.1200 (g)(2).

Falchion

Version	Revision Date:
2.0	07/25/2025

1. IDENTIFICATION OF THE PRODUCT & COMPANY

Product Name: **Falchion**

Other means of identification: EPA Reg. No. 103087-12

Intended Use: Fungicide

Company Identification:
Longwind Cropscience USA LLC.
8 THE GREEN, STE A, DOVER, KENT,
DE, 19901, UNITED STATES

Emergency Information: In the event of a leak, fire or medical emergency involving a human or animal please call INFOTRAC: 1-800-535-5053 or Outside the USA and Canada at 1-352-323-3500, 24/7/365.

2. HAZARD IDENTIFICATION

GHS-US classification

Health and Environmental Hazards:

Acute toxicity - Oral	Category 4
Eye irritation	Category 2B
Aspiration Hazard	Category 1
Carcinogenicity	Category 2

Required Label Elements

Pictograms:



Signal Word: Danger

Hazard Statements:
Harmful if swallowed.
May be fatal if swallowed and enters airways
Causes eye irritation
Suspected of causing cancer

Precautionary Statements:
Prevention:
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
Avoid breathing mist/vapours/spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ eye protection/ face protection.

Response:
IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage and Disposal:
Store in a well-ventilated place. Keep cool.
Dispose of contents/ container to an approved waste disposal plant.

Other information
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	CONTENT %	Active Ingredient
Metalaxyl-M	70630-17-0	24.2-25.6	X
Naphtha (petroleum), heavy aromatic	64742-94-5	60-70	
Naphthalene	91-20-3	0-1%	
Other ingredient	N/A	10-15	

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Eye contact: Hold eye open and rinse slowly and gently with water for several minutes. Remove contact lenses, if present, then continue rinsing eye. If irritation persists: call a poison control center or doctor for treatment advice.
Ingestion: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. DO NOT induce vomiting. Do not give anything by mouth to an unconscious person.
Inhalation: Move person to fresh air. Call a poison control center or doctor for further treatment

advice.
Indication of Immediate medical attention and special treatment if needed, if necessary: Immediate medical attention is required for ingestion.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.
Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.
Fire and Explosion Hazards: May produce gases such as oxides of carbon and nitrogen.
Special protective equipment for fire-fighters: Firefighters should wear NIOSH approved self -contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources.Dispose of fire control water later.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.
Environmental precautions: Prevent material from entering public sewer systems or any waterways, Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.
Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.
Method for cleaning up: Avoid creation of dusty conditions. Scrape up and place inappropriate closed container. Wash entire spill area with a detergent slurry, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13.DISPOSAL CONSIDERATIONS for more information.

7. HANDLING AND STORAGE

Handling : Do not get in eyes or on clothing or skin. Users should wash hands before eating, drinking chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage : Store in the closed, original container in a cool, well ventilated area out of direct sunlight. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters
Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Metalaxyl-M	70630-17-0	TWA	5 mg/m^3	OES
Naphthalene	91-20-3	TWA CEIL	10 ppm/52 mg/m^3 15 ppm/79 mg/m^3	ACGIH TLV
		TWA	10 ppm 50 mg/m^3	OSHA PEL

Engineering measures： Where engineering controls are indicated by specific use conditions or a potential for excessive exposure use local exhaust ventilation at the point of generation.

Individual protection measures, such as personal protective equipment
Eye/Face Protection: Not normally required. To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.
Skin and body Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks and shoes. An emergency shower or water supply should be readily accessible to the work area.
Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.
General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in are as where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco.applying cosmetics or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow to light brown liquid
Ordor:	Characteristic odor
Melting/Freezing Point:	Not determined
pH:	4.0-7.0
Solubilities:	Not determined
Flash point:	89 °C
Explosive properties:	Non-explosive
Density:	1.0133 g/mL at 20 °C
Viscosity：	11.8-14.3 mPa/s at 20 ± 0.2 °C 6.4-7.28 mPa/s at 40 ± 0.2 °C
Oxidation	Non-oxidation

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.
Chemical Stability: This material is stable under normal handling and storage conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Avoid heat or open flame.
Incompatible Materials: Strong oxidizing agents: bases and acids.
Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides ofcarbon and nitrogen.

11. TOXICOGICAL INFORMATION

Likely Routes of Exposure: Dermal, inhalation
Symptoms of Exposure:
Eye Contact: Mildly irritating based on toxicity studies.
Skin Contact: Minimally toxic and slightly irritating based on toxicity studies
Ingestion: Slightly toxic if ingested based on toxicity studies. Aspiration hazard - may be harmful or fatalif aspirated into lungs during swallowing or vomiting.
Inhalation: Low inhalation toxicity based on toxicity studies.
Delayed, immediate and chronic effects of exposure: None reported

Toxicological Data:
Oral: Rat LDso: 500-5,000 (female) and >5,000 mg/kg (male)
Dermal: Rat LDso: >5,000 mg/kg

Inhalation: Rat 4-hr LCso: <2.06 mg/L (No mortalities at the highest dose tested)
Eye Irritation: Rabbit: Mildly irritating (MM = 36.2)
Skin Irritation: Rabbit: Slightly irritating
Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.
Subchronic (Target Organ) Effects: Repeated overexposure to Metalaxyl-M may affect the liver

Carcinogenicity / Chronic Health Effects: Metalaxyl-M did not cause cancer in laboratory animals. EPA has classified Metalaxyl-M as a Group E (not likely to be carcinogenic in humans) carcinogen. The hydrocarbon component may contain naphthalene, which is listed by lARC as a class 2B and the U.S National Toxicology Program as reasonably anticipated to be a human carcinogen.
Reproductive Toxicity: For Metalaxyl-M, no reproductive effects observed.
Developmental Toxicity: For Metalaxyl-M, no developmental effects observed
Genotoxicity: Studies with Metalaxyl-M did not demonstrate mutagenic effects.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Data on Metalaxyl-M
96-hour LC_{50} Rainbow Trout: >121 mg/L
Bobwhite Quail Oral LD_{50}: >981 mg/kg
Bobwhite Quail 8-day Dietary LC_{50}: >4,830 ppm
48-hour EC_{50} Daphnia: >113 mg/L
49-hour Honey Bee Contact LD_{50}: >25 μg/bee

Environment fate:
In soils, Metalaxyl-M is moderately stable under normal environmental conditions. The primary routes of dissipation in surface soil are aerobic soil metabolism from microbial degradation and uptake by plants Hydrolysis, photolysis and volatlization are not significant routes of breakdown. Metalaxyl-M is very water soluble and variably binds to organic materials in the soils. In the aquatic environment, Metalaxyl-M degrades moderately under both aerobic and anaerobic conditions by microbial degradation.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. lmproper disposal of excess pesticide is a violation of Federal law.

Contaminated packaging

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap.Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. lf burned, stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefllable container. Do not reuse or refill this container, Triple rinse or pressure rinse container (or equivalent) promptly after emptying, Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth,

ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by bumming. If burned, stay out of smoke.

14. TRANSPORTATION INFORMATION

DOT :	Not Regulated when shipped domestically in individual containers less than 119 gallons
	For packages greater than 119 Gallons:
UN/ID no	NA1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (contains naphthalene)
Hazard class	Class 3
Packing group	III
IATA	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word CAUTION

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin.
DO NOT get in eyes or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

SARA 313
The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

Chemical name	SARA 313 - Threshold Values %
Naphthalene - 91-20-3	0.1

CERCLA
This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Naphthalene - 91-20-3	100 lb	-

16. OTHER INFORMATION

This MSDS summarizes 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 MSDS and consider the information in the context of the 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 the company.