

## MATERIAL SAFETY DATA SHEET

### SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:** FULLBACK 125 SC Fungicide

**Product use:** Fungicide.

**PCP Number:** 31679

**Supplier's name and address:**

***Cheminova Canada Inc.***

22499 Jefferies Road, Unit C2,

Kilworth, ON

Canada N0L 1R0

Phone #: 1-888-316-6260 (8 AM to 4:00 PM EST, Monday to Friday)

**Emergency Telephone #:** 1-866-303-6950 (Medical Emergencies)

1-(613) 996-6666 (CANUTECH)

**MSDS Prepared by:** Cheminova Inc.

**MSDS Preparation date:** December 22, 2014

**Revision date:**

**Revision reasons:**

**Manufacturer's name and address:**

Cheminova A/S.

P.O. Box 9

DK-7620 Lemvig

Denmark

### SECTION 2 — HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Off-white/brown liquid (suspension in water).

Characteristic odor between fish- and glue-like.

#### WARNING

May be harmful if inhaled. May cause respiratory tract irritation.

Causes eye irritation. Contains material which can cause liver damage.

May be dangerous for the environment. This product is toxic to fish, aquatic invertebrates, and algae and harmful to bees.

In case of fire, use CO<sub>2</sub>, dry chemical, water spray or foam.

#### \*\*\*POTENTIAL HEALTH EFFECTS\*\*\*

**Routes of entry:** Inhalation, skin, eyes, ingestion/oral.

**Target organs:** Eyes, skin, lungs, liver.

**Signs and symptoms of short-term (acute) exposure:**

*Inhalation:* Inhalation may cause irritation to the nose, throat and upper respiratory tract.

*Skin contact:* Direct skin contact may cause mild irritation. Prolonged skin contact may be more irritating.

*Eye contact:* Direct eye contact may cause moderate to severe irritation.

*Ingestion:* Harmful if swallowed. At high dosage, could cause salivation, depression of activity, muscle spasms, ataxia and increase body temperature, based on animal data.

**Signs and symptoms of long-term (chronic) exposure:**

*Inhalation:* Prolonged or repeated overexposure may cause liver damage, even at low levels.

**Carcinogenicity:** See TOXICOLOGICAL INFORMATION (Section 11).

**Potential environmental effects:** This product is toxic to aquatic organisms. See ECOLOGICAL INFORMATION (Section 12).

**U.S. OSHA GHS:**

**Signal Word:**

Warning

**Classification:**

Health	Environmental	Physical
Sensitization – Skin – Category 1B	Aquatic Toxicity – Chronic 2	Not applicable

**GHS Pictogram:**



**Hazard Statements:**

May cause allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements:**

**Prevention:**

Avoid breathing mist, vapours and spray.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves (such as barrier laminate, butyl rubber, nitrile rubber or viton).  
Avoid release to the environment.

**Response:**

If on skin: wash with plenty of water.  
If skin irritation or rash occurs: Get medical advice.  
Wash contaminated clothing before reuse.  
Collect spillage.

**Storage:**

None

**Disposal:**

Dispose of contents/container according to label directions.

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

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Flutriafol (1H-1,2,4-Triazole-1-ethanol, $\alpha$ -(2-fluorophenyl)- - $\alpha$ -(4-fluorophenyl)- Inert ingredients NE= None established	76674-21-0	10-15   85-90	NE	NE

**SECTION 4 — FIRST AID MEASURES**

<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
<b>IF SWALLOWED:</b>	Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

Note to physician: There is no specific antidote for exposure to this material. Treatment of exposure is as for a general chemical. Gastric lavage and/or administration of activated charcoal can be considered.

Immediate medical attention is required in case of ingestion. Have the product container or label with you when calling a poison control centre or doctor, or when going for treatment. You may also contact 1-866-303-6950 for emergency medical treatment information.

## SECTION 5 — FIRE FIGHTING MEASURES

**Flash point (Method):** >210° F (>99° C) closed cup

**Flammable limits, upper/lower (% by volume):** Not established

**Autoignition Temperature:** Not applicable

**Explosive properties:** Not explosive

**Suitable extinguishing media:** For small fires, use dry chemical or carbon dioxide. For large fires, use water spray or foam.

**Special fire-fighting procedures/equipment:** Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Fire fighters should wear self-contained breathing apparatus and protective clothing.

**Unusual fire and explosion hazards:** The essential breakdown products are volatile, malodorous, toxic, irritant and inflammable compounds such as hydrogen fluoride, nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide and various fluorinated organic compounds.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Appropriate protective equipment must be worn when handling a spill of this material. If exposed to material during clean-up operations, 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. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

**Environmental precautions:** Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

**Spill response/Cleanup:** If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, hydrated lime, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with industrial detergent and much water. Absorb wash liquid with absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.

Spills which soak into the ground should be dug up and transferred to suitable containers for disposal.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

Refer to Section 13 for disposal.

**Prohibited materials:** None known.

## SECTION 7 — HANDLING AND STORAGE

**Safe handling procedures:** Avoid inhalation and ingestion of product. Avoid contact with skin, eyes, and clothing.

**Storage recommendations:** Keep in closed, labelled containers. The storage room should be constructed of incombustible material. Store in a closed, dry and ventilated space with an impermeable floor. Keep out unauthorised persons and children.

Protect from temperatures above 77° F (25° C). Protect from frost, fire and heat.

**Other information:** Remove contaminated clothing immediately. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and footwear. Take a shower, using water and soap. Wear only clean clothes when leaving job. Wash protective clothing and protective equipment with water and soap after each use.

## SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Ventilation and engineering controls:** If handled indoors, provide mechanical exhaust ventilation to minimize concentrations.

**Respiratory protection:** Respiratory protection is required when heavy vapour/mists are present.

**Protective gloves:** Wear chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton.

**Eye protection:** Wear protective eyewear, such as chemical goggles. It is recommended to have an eye wash fountain immediately available when there is potential for eye contact.

**Other protective equipment:** Wear long-sleeved shirt and long pants, shoes and socks. Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure.

**Permissible exposure levels:** See Section 3.

**General hygiene considerations:** Avoid contact with eyes, skin or clothing. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbed materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Wash hands before eating, drinking, chewing gum,

using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and odor:** Off-white/brown liquid (suspension in water). Fish- or glue-like odor.

**pH:** Undiluted: 7.1 @ 25° C; 1% dilution in water: 6.5 @ 25° C

**Flash point:** >210° F (>99° C) closed cup

**Melting point:** <32° F (<0° C)

**Bulk density:** Not established

**Specific gravity:** 0

**Vapour density (air=1):** 1

**Vapour pressure:** 0.53 mmHg (torr) @ 68° F; **Flutriafol:** 7.1 x 10<sup>-9</sup> Pa @ 20° C

**Evaporation rate:** Not established

**Boiling point:** 210° F (99° C)

**Freezing point:** Not established

**Coefficient of n-octanol/water:** **Flutriafol:** K<sub>ow</sub> = 2.29

<b>Solubility(ies):</b>	<b>Solubility of Flutriafol at 21° C in:</b>	
	acetone	114 – 133 g/L
	ethyl acetate	29 – 33 g/L
	n-heptane	< 10 g/L
	xylene	< 10 g/L
	dichloroethane	20 – 25 g/L
	methanol	114 – 133 g/L
	water	0.13 g/L

## SECTION 10 — REACTIVITY AND STABILITY DATA

**Stability and reactivity:** This product is stable under the recommended storage and handling conditions described in Section 7.

**Hazardous polymerization:** Not known to occur.

**Conditions to avoid:** Keep away from moisture, heat, flame and direct sunlight.

**Materials to avoid (incompatibles):** Avoid contact with oxidizing agents, copper, copper alloys.

**Hazardous Decomposition Products:** The essential breakdown products are volatile, malodorous, toxic, irritant and inflammable compounds such as hydrogen fluoride, nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide and various fluorinated organic compounds.

## SECTION 11 — TOXICOLOGICAL INFORMATION

**Routes of exposure:** Inhalation, skin contact, eye contact, ingestion/oral

**Toxicological data:**

LC<sub>50</sub> (mg/L/4 hrs) = >2.10 (4-hrs)

LD<sub>50</sub>, oral, (mg/kg) = >3000

LD<sub>50</sub>, dermal, (mg/kg) = >4000

Eye irritation = Mildly irritating

Skin irritation = Non-irritating

Skin sensitizer = Not a skin sensitizer

**Carcinogenicity:** None of the listed ingredients is listed as carcinogenic.

**Teratogenicity, mutagenicity, other reproductive effects:** No known teratogenic, mutagenic or reproductive effects.

## SECTION 12 — ECOLOGICAL INFORMATION

**Environmental hazards:** The product is toxic to fish, aquatic invertebrates and algae and harmful to bees. It is not considered harmful to birds and soil micro- and macroorganisms.

**Ecotoxicological information:** The ecotoxicity of the product or similar product is measured as:

Fish – 96-hr LC<sub>50</sub>, Rainbow trout (*Salmo gairdnerii*) = 7.9 mg/l

Algae – 72-hr EC<sub>50</sub>, Green algae (*Pseudokirchneriella subcapitata*) = 10 mg/l

72-hr EC<sub>50</sub>, Diatoms (*Skeletonema costatum*) = 4.7 mg/l

Plants – 7-day EC<sub>50</sub>, Duckweed (*Lemna gibba*) = 53 mg/l

Invertebrates – 48-hr EC<sub>50</sub>, Daphnids (*Daphnia magna*) = 7.5 mg/l

Birds – 14-day LD<sub>50</sub>, Japanese quail (*Coturnix coturnix japonica*) = >2000 mg/kg bw  
Bees – 48-hr LD<sub>50</sub>, oral, Honeybees (*Apis mellifera*) = >100 µg/bee

**Environmental fate:**

**Flutriafol** is not readily degradable and is not expected to bioaccumulate. The potential for mobility of **flutriafol** in soil is moderate.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

**Handling for disposal:** Avoid wastes. Use all material by application according to label directions. If wastes cannot be avoided, offer remaining product to waste disposal facility or pesticide disposal program.

**Methods of disposal:** Do not contaminate water, food, or feed by storage or disposal. Do not discharge to sewer systems. Refer to product label for specific container disposal instructions.

**SECTION 14 — TRANSPORTATION INFORMATION**

**Canadian TDG Information:**

**Road/Rail:** Not regulated  
**Vessel:** UN3082, Environmentally hazardous substance, liquid, n.o.s. (flutriafol), 9, PGIII, Marine Pollutant

**INTERNATIONAL:**

**IMDG/IMO (vessel):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (flutriafol), 9, PGIII, Marine Pollutant

**IATA/ICAO (air):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (flutriafol), 9, PGIII, Marine Pollutant

**SECTION 15 — REGULATORY INFORMATION**

**CANADIAN REGULATIONS:**

This product has been classified in accordance with the hazard criteria for the Controlled Products Regulation (CPS) and the SDS contains all the information required by the CPR.

This product is a Pest Control Product and is not regulated as a Controlled Product under the Hazardous Product Act (HPA).

**Domestic Substances List (DSL):** All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

**WHMIS information:** This product is a Pest Control Product and is not regulated as a Controlled Product under the Hazardous Products Act (HPA). However, for reference purposes only, this product would have the following WHMIS Classification if it were regulated as a Controlled Product under the HPA: **Class D2B** (*Materials causing other toxic effects, Toxic Material*).

**U.S. REGULATIONS:**

**FIFRA:** All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulating facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

**OSHA information:** This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

**EPA/CERCLA Reportable Quantity (RQ):** Not applicable

**SARA TITLE III:**

*Sec. 302, Extremely Hazardous Substance Notification:* This material is not known to contain any Extremely Hazardous Substances.

*Sec. 311/312, Hazard Categories:* Immediate (acute) health hazard  
Chronic (delayed) health hazard

*Sec. 313, Toxic Chemicals Notification:* Not subject to SARA notification requirements.

**California Proposition 65:** This product does not contain any chemicals known to the state of California to cause cancer or reproductive harm.

**SECTION 16 — OTHER INFORMATION**

**HMIS Rating:** 2 Health; 1 Flammability; 0 Reactivity

**NFPA Rating:** 2 Health; 1 Flammability; 0 Reactivity

0-minimal 1-slight 2-moderate 3-severe 4-extreme

**Prepared by:** Cheminova Inc.

**Preparation date:** December 22, 2014