



**TEMPO FOGGER AE0,39**

Version 1 / ZA  
102000019435

1/11  
Revision Date: 09.07.2019  
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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

**Trade name** TEMPO FOGGER AE0,39  
**Product code (UVP)** 79250304

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

**Use** Insecticide

**1.3 Details of the supplier of the safety data sheet**

**Supplier** Bayer (Pty) Ltd.  
27 Wrench Road, P.O. Box 143  
1600 Isando  
South Africa  
**Telephone** +27 (011) 921 5911  
**Telefax** +27 (011) 921 5766  
**Responsible Department** QHSE - Nigel, South Africa  
+27 (011) 365 8675 (during business hours only)

**1.4 Emergency telephone no.**

**Emergency telephone no.** +27 (0861) 555 777 (Western Cape Poisons Helpline)  
**Global Incident Response Hotline (24h)** +1 (760) 476 3964 (Company 3E for Bayer AG, Crop Science Division)

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**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Aerosols: Category 1  
H222 Extremely flammable aerosol.  
Eye irritation: Category 2  
H319 Causes serious eye irritation.  
Specific target organ toxicity - single exposure: Category 3  
H336 May cause drowsiness or dizziness.  
Acute aquatic toxicity: Category 1  
H400 Very toxic to aquatic life.  
Chronic aquatic toxicity: Category 1  
H410 Very toxic to aquatic life with long lasting effects.

**2.2 Label elements**

**Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Hazard label for supply/use required.

**Hazardous components which must be listed on the label:**



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- Transfluthrin
- Cyfluthrin
- Triflumuron
- Acetone
- Dimethyl ether



**Signal word:** Danger

**Hazard statements**

- H222 Extremely flammable aerosol.  
 H229 Pressurised container: May burst if heated.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 H410 Very toxic to aquatic life with long lasting effects.  
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

**Precautionary statements**

- P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P260 Do not breathe spray.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.  
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.  
 P501 Dispose of contents/container in accordance with local regulation.

**2.3 Other hazards**

Pressurised container, heating will cause pressure rise with a risk of bursting.  
 Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

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

**3.2 Mixtures**

**Chemical nature**

Aerosol dispenser (AE)  
 Transfluthrin 0,04% + Cyfluthrin 0,10% + Triflumuron 0,25%

**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Transfluthrin	118712-89-3	Aquatic Chronic 1, H410 Skin Irrit. 2, H315	0,04

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		Aquatic Acute 1, H400	
Cyfluthrin	68359-37-5	Acute Tox. 2, H300 Acute Tox. 2, H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	0,10
Triflumuron	64628-44-0	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	0,25
Acetone	67-64-1 01-2119471330-49-XXXX	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	> 20
Dimethyl ether	115-10-6	Flam. Gas 1, H220 Press. Gas H280	> 50

**Further information**

Transfluthrin	118712-89-3	M-Factor: 1.000 (acute)
Cyfluthrin	68359-37-5	M-Factor: 1.000 (acute), 1.000 (chronic)
Triflumuron	64628-44-0	M-Factor: 100 (acute)

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

<b>General advice</b>	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	If abnormal over-exposure and inhalation of the aerosol occurs, the following advice is applicable: Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
<b>Skin contact</b>	In case of skin irritation, application of oils or lotions containing vitamin E may be considered. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. If symptoms persist, call a physician.
<b>Eye contact</b>	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. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Ingestion of the liquid of the aerosol is unlikely. However, if ingested, the following advice is applicable. Rinse mouth. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms** No symptoms known or expected.**4.3 Indication of any immediate medical attention and special treatment needed**



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**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. There is no specific antidote.

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**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire., Heating can lead to increased pressure with risk of explosion.

**5.3 Advice for firefighters**

**Special protective equipment for firefighters** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**Further information** Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

**Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Do not enter confined spaces unless adequately ventilated. Remove all sources of ignition.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.

**6.3 Methods and materials for containment and cleaning up**

**Methods for cleaning up** The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

**6.4 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.

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**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

**Advice on safe handling** No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

**Advice on protection against fire and explosion** Fire or intense heat may cause violent rupture of packages. Keep away from heat and sources of ignition. Take measures to prevent the build up

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of electrostatic charge.

**Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again.

**7.2 Conditions for safe storage, including any incompatibilities****Requirements for storage areas and containers**

BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Protect from frost.

**Advice on common storage**

Keep away from food, drink and animal feedingstuffs.

**German storage class**

2B Aerosol dispensers and lighters

**7.3 Specific end use(s)**

Refer to the label and/or leaflet.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Transfluthrin	118712-89-3	1,87 mg/m <sup>3</sup> (TWA)		OES BCS*
Cyfluthrin	68359-37-5	0,01 mg/m <sup>3</sup> (TWA)		OES BCS*
Triflumuron	64628-44-0	0,2 mg/m <sup>3</sup> (TWA)		OES BCS*
Acetone	67-64-1	1.780 mg/m <sup>3</sup> /750 ppm (TWA)	1995	ZA REL
Acetone	67-64-1	3.560 mg/m <sup>3</sup> /1.500 ppm (STEL)	1995	ZA REL
Acetone	67-64-1	500 ppm (TLV)		OES BCS*

\*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

**8.2 Exposure controls****Respiratory protection**

Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.

Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

**Hand protection**

Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

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Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0,4 mm
Protective index	Class 6
Directive	Protective gloves complying with EN 374.

<b>Eye protection</b>	Personal protective equipment is not normally required when using the aerosol. However, if there is a risk of uncontrolled exposure to the contents, the following should be considered. Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
<b>Skin and body protection</b>	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
<b>General protective measures</b>	Do not inhale aerosols.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Form</b>	aerosol
<b>Colour</b>	colourless
<b>Density</b>	ca. 0,79 g/cm <sup>3</sup> ( 20 °C)
<b>Partition coefficient: n-octanol/water</b>	Transfluthrin: log Pow: 5,46 Cyfluthrin: log Pow: 5,9 - 6,0 (20 °C) Triflumuron: log Pow: 4,9 (22 °C)

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

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

**Thermal decomposition** Stable under normal conditions.

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.



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- 10.4 Conditions to avoid** Extremes of temperature and direct sunlight.
- 10.5 Incompatible materials** Store only in the original container.
- 10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

- Acute oral toxicity** ATE (Mix) (Rat) > 5.000 mg/kg  
calculated
- Acute inhalation toxicity** ATE (Mix) (Rat) > 100 mg/l  
Exposure time: 4 h  
calculated
- Acute dermal toxicity** ATE (Mix) (Rat) > 5.000 mg/kg  
calculated
- Skin corrosion/irritation** No skin irritation (Rabbit)  
The information is derived from the properties of the individual components.
- Serious eye damage/eye irritation** Irritating to eyes. (Rabbit)  
The information is derived from the properties of the individual components.
- Respiratory or skin sensitisation** Skin: Non-sensitizing. (Guinea pig)  
The information is derived from the properties of the individual components.

**Assessment STOT Specific target organ toxicity – single exposure**

Transfluthrin: Based on available data, the classification criteria are not met.  
Cyfluthrin: Based on available data, the classification criteria are not met.  
Triflumuron: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure**

Transfluthrin did not cause specific target organ toxicity in experimental animal studies.  
The toxic effects of Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.  
Triflumuron did not cause specific target organ toxicity in experimental animal studies.

**Assessment mutagenicity**

Transfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.  
Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.  
Triflumuron was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Transfluthrin caused at high dose levels an increased incidence of tumours in the following organ(s): Liver, urinary bladder. The tumours seen with Transfluthrin were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.  
Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.  
Triflumuron was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

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Transfluthrin did not cause reproductive toxicity in a two-generation study in rats.  
Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Cyfluthrin is related to parental toxicity.  
Triflumuron did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Transfluthrin did not cause developmental toxicity in rats and rabbits.  
Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Cyfluthrin are related to maternal toxicity.  
Triflumuron did not cause developmental toxicity in rats and rabbits.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

<b>Toxicity to fish</b>	LC50 (Oncorhynchus mykiss (rainbow trout)) 0,00047 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient cyfluthrin.
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia magna (Water flea)) 0,00016 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient cyfluthrin.
<b>Toxicity to aquatic plants</b>	IC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient cyfluthrin.

**12.2 Persistence and degradability**

<b>Biodegradability</b>	Transfluthrin: Not rapidly biodegradable Cyfluthrin: Not rapidly biodegradable Triflumuron: Not rapidly biodegradable
<b>Koc</b>	Transfluthrin: Koc: > 4000 Cyfluthrin: Koc: 64300 Triflumuron: Koc: 8601

**12.3 Bioaccumulative potential**

<b>Bioaccumulation</b>	Transfluthrin: Bioconcentration factor (BCF) 1.607 Does not bioaccumulate. Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate. Triflumuron: Bioconcentration factor (BCF) 612 Does not bioaccumulate.
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**12.4 Mobility in soil**

<b>Mobility in soil</b>	Transfluthrin: Immobile in soil Cyfluthrin: Immobile in soil Triflumuron: Immobile in soil
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**12.5 Results of PBT and vPvB assessment**





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**PBT and vPvB assessment** Transfluthrin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).  
Cyfluthrin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).  
Triflumuron: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**12.6 Other adverse effects**

**Additional ecological information** No other effects to be mentioned.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Product** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Contaminated packaging** Ensure aerosol container is empty before disposal. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Not completely emptied packagings should be disposed of as hazardous waste.

**SECTION 14: TRANSPORT INFORMATION**

**SANS 10231**

14.1 UN number	<b>1950</b>
14.2 Proper shipping name	AEROSOLS
14.3 Transport hazard class(es)	2.1
14.4 Packaging Group	NOT APPLICABLE.
14.5 Environm. Hazardous Mark	YES

**IMDG**

14.1 UN number	<b>1950</b>
14.2 Proper shipping name	AEROSOLS (CYFLUTHRIN MIXTURE)
14.3 Transport hazard class(es)	2.1
14.4 Packaging Group	NOT APPLICABLE.
14.5 Marine pollutant	YES

**IATA**

14.1 UN number	<b>1950</b>
14.2 Proper shipping name	AEROSOLS, FLAMMABLE
14.3 Transport hazard class(es)	2.1
14.4 Packaging Group	NOT APPLICABLE.
14.5 Environm. Hazardous Mark	NO

**14.6 Special precautions for user**

See sections 6 to 8 of this Safety Data Sheet.

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No transport in bulk according to the IBC Code.

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Further information**

WHO-classification: U (Unlikely to present acute hazard in normal use)

**SECTION 16: OTHER INFORMATION****Text of the hazard statements mentioned in Section 3**

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H300	Fatal if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Abbreviations and acronyms**

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations

**SAFETY DATA SHEET** according to Regulation (EC) No. 1907/2006



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WHO World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

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