Version: 2

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SAFETY DATA SHEET

Conforms to Regulation EC 1907/2006 (REACH) as amended by Regulation (EU) 2015/830

ZER434 – ZERO IN CLOTHES MOTH KILLER

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier

Zero In Clothes Moth Killer

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

For use as an insecticide

1.3. Details of the supplier of the safety data sheet

STV International Ltd Forge House Little Cressingham Watton Thetford Norfolk IP25 6ND

+ 44 (0) 1953 881 580 (Office hours only) info@stvpestcontrol.com

1.4. Emergency telephone number

For product information, contact STV International Ltd on the telephone number stated in section 1.3.

In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

For urgent medical advice, call the NHS Helpline on 111 (England, Scotland & Wales). For medical emergencies, dial 999 (UK & Ireland) or 112 from any EU country.

Environmental agency emergency phone number 0800 807060.

SECTION 2: Hazards identification 2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 Flam. Aerosol 1; H222, H229 Aquatic Acute 1; H400

2.2. Label elements

Hazard Pictogram GHS02, GHS09



Signal Word Danger

Hazard Statements

H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

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.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/ container in accordance with local regulations.

Other labelling required under Regulation (EC) 1272/2008

None.

2.3. Other hazards

This mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No 1907/2006 (REACH).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical Name	CAS/EC No	Classification in accordance with Regulation (EC) 1272/2008	Conc [%]
DIMETHYL ETHER	115-10-6 204-065-8	Flam. Gas 1 - H220 Press. Gas (Liq.) - H280	30-60
CYPERMETHRIN CIS/TRANS +/- 40/60 (RS)-A-CYANO-3PHENOXYBENZYL (1RS ,3RS ;1RS ,3SR)-3-(2,2DICHLOROVINYL)-2,2DIMETHYLCYCLOPROPANECARBOXYLATE	52315-07-8 257-842-9	Acute Tox. 4 - H302 Acute Tox. 4 - H332 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Acute 1 - H400	<1

Aquatic Chronic 1
- H410
M factor (Acute)
= 1000
M factor
(Chronic) = 1000

Full text of hazard statements is displayed in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

This product is not considered to be hazardous to human health. However, if exposure occurs, the following first aid measures should be followed:

Inhalation

Move exposed person to fresh air. If breathing discomfort occurs, seek medical attention.

Skin

Wash contaminated skin with plenty of soap and water. Seek medical attention if skin irritation occurs.

Eyes

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Seek medical attention if eye irritation occurs.

Ingestion

Wash out mouth with water. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation - Coughing, chest tightness, feeling of chest pressure.

 $Ingestion \hbox{ -- Gastrointestinal symptoms, including upset stomach.} \\$

Skin contact - Prolonged contact may cause dryness of the skin.

Eye contact - May cause discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

No specific advice. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container: may burst if heated.

Thermal decomposition or combustion products may include the following substances:

Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

5.3. Advice for firefighters

Cool containers exposed to flames with water until well after the fire is out.

Wear protective clothing to prevent contact with skin and eyes.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. No smoking, sparks, flames or other sources of ignition near spillage. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Avoid contact with contaminated tools and objects. Take care as floors and other surfaces may become slippery. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Environmental agency emergency phone number 0800 807060.

6.3. Methods and material for containment and cleaning up

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

See section 1 for emergency contact information.

See section 8 for information on appropriate personal protective equipment.

See section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of the reach of children. Use biocides safely. Always read the label and product information before use. Read label before use. Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. To avoid risks to human health and the environment, comply with the instructions for use. Do not handle until all safety precautions have been read and understood. Do not breathe vapour/spray. Do not get in eyes, on skin, or on clothing. Do not expose to temperatures exceeding 50°C/122°F. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Avoid release to the environment. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store at temperatures between 4°C and 40°C. Do not expose to temperatures exceeding 50°C/122°F. Keep out of the reach of children.

Storage class Flammable compressed gas storage.

7.3. Specific end use(s)

For use as an insecticide

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

DIMETHYL ETHER

Long-term exposure limit (8-hour TWA): WEL 400 ppm 766 mg/m³ Short-term exposure limit (15-minute): WEL 500 ppm 985 mg/m³

WEL = Workplace Exposure Limit

DIMETHYL ETHER (CAS: 115-10-6)

DNEL

Workers - Inhalation; Long term systemic effects: 1894 mg/m³ Consumer - Inhalation; Long term systemic effects: 471 mg/m³

PNEC

Fresh water; 0.155 mg/lMarine water; 0.016 mg/l

- Intermittent release; 1549 mg/l

- STP; 160 mg/l

Sediment (Freshwater); 0.681 mg/lSediment (Marinewater); 0.069 mg/l

- Soil; 0.045 mg/l

CYPERMETHRIN CIS/TRANS +/- 40/60 (RS)-A-CYANO-3-PHENOXYBENZYL (1RS ,3RS ;1RS ,3SR)-3-(2,2DICHLOROVINYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATE (CAS: 52315-07-8) PNEC

- Fresh water; 0.000001 mg/l
- STP; 1.63 mg/l - Soil; 0.1 mg/kg

8.2. Exposure controls

Engineering controls

Provide adequate ventilation.

Eye/face protection

Eye/face protection not normally required.

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Hand protection not normally required.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. After contamination with

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product change gloves immediately and dispose of them according to relevant national and local regulations.

Recommended: (<1 hour) PVC, Nitrile gloves.

Respiratory protection

No personal respiratory protective equipment normally required. 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. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Always follow respirator manufacturer's instructions regarding wearing and maintenance. Recommended: Full mask with type ABEK filter.

Environmental exposure controls

Steps should be taken to ensure that this product is not released accidentally into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: White/off-white aerosol

Odour: Mild

Odour threshold: Information not available

pH: Information not available

Melting point/freezing point: Information not available

Initial boiling point and boiling range: Information not available

Flash point: Information not available Evaporation rate: Information not available Flammability: Information not available

Upper/lower flammability or explosive limits: Information not available

Vapour pressure: Information not available Vapour density: Information not available Relative density: Information not available

Solubility(ies): Soluble in water

Partition coefficient: n-octanol/water: Information not available

Auto-ignition temperature: Information not available Decomposition temperature: Information not available

Viscosity: Information not available

Explosive properties: Information not available Oxidising properties: Information not available

9.2. Other information

None

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Product is stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicity of product

Acute toxicity: Not expected to be toxic.

Skin corrosion/irritation: Product is not classified as causing skin corrosion or irritation.

Serious eye damage/irritation: Product is not classified as causing serious eye damage or irritation

Respiratory or skin sensitisation: Product is not classified as sensitising.

Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity:

STOT-single exposure:

STOT-repeated exposure:

Aspiration hazard:

No information specified.

No information specified.

No information specified.

No information specified.

Toxicity of ingredients

CYPERMETHRIN CIS/TRANS +/- 40/60 (RS)-A-CYANO-3-PHENOXYBENZYL (1RS ,3RS ;1RS ,3SR)-3-(2,2DICHLOROVINYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 301.0 Species Rat

ATE oral (mg/kg) 301.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.1

Species Rat

ATE dermal (mg/kg) 2,000.1

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 3.281

Species Rat

ATE inhalation (dusts/mists mg/l) 3.281

SECTION 12: Ecological information

12.1. Toxicity

Toxicity of product

This product is classified as very toxic to aquatic life with long lasting effects.

Toxicity of ingredients

DIMETHYL ETHER

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: 4001 mg/l, Poecilia reticulata (Guppy)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 4001 mg/l, Daphnia magna LC₅₀, 48 hour: 755549 mg/l, Daphnia magna

Acute toxicity - aquatic plants LC₅₀, 96 hour: 154.9 mg/l, Algae

CYPERMETHRIN CIS/TRANS +/- 40/60 (RS)-A-CYANO-3-PHENOXYBENZYL (1RS ,3RS ;1RS ,3SR)-3-(2,2DICHLOROVINYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATE

Acute aquatic toxicity

 $LE(C)_{50} 0.0001 < L(E)C50 \le 0.001$

M factor (Acute) 1000

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 0.00471 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 96 hours: >33 mg/l, Pseudokirchneriella subcapitata

Acute toxicity microorganisms

EC₅₀, 3 hours: 163 mg/l, Activated sludge

Acute toxicity - terrestrial

NOEC, : 52 mg/kg, Soil micro-organisms

EC₅₀, 14 days: 100 mg/kg, Eisenia Fetida (Earthworm) NOEC, 8 weeks: 5.2 mg/kg, Eisenia Fetida (Earthworm)

LC₅₀, 5 days: >1376 mg/kg/day, Colinus Virginianus (Bobwhite Quail) NOEC, 21 weeks: >92 mg/kg/day, Colinus Virginianus (Bobwhite Quail)

Chronic aquatic toxicity

NOEC 0.00001 < NOEC ≤ 0.0001 Degradability Non-rapidly degradable M factor (Chronic) 1000

12.2. Persistence and degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

The product contains substances which are water-soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Information not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods

Dispose of contents/container in accordance with all local, regional, national and international regulations.

SECTION 14: Transport information

14.1. UN number

UN1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2.1

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This substance is classified and labelled in accordance with Regulation (EC) 1272/2008 and Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ATE: Acute Toxicity Estimate.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level.

EC₅₀: 50% of maximal Effective Concentration.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

 LC_{50} : Lethal Concentration to 50 % of a test population.

 LD_{50} : Lethal Dose to 50% of a test population (Median Lethal Dose).

NOEC: No Observed Effect Concentration.

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PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

vPvB: Very Persistent and Very Bioaccumulative.

UN: United Nations.
Acute Tox. = Acute toxicity

Aerosol = Aerosol

Aquatic Acute = Hazardous to the aquatic environment (acute)
Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Asp. Tox. = Aspiration hazard

Press. Gas (Comp.) = Gas under pressure: Compressed gas

Skin Sens. = Skin sensitisation

STOT SE = Specific target organ toxicity-single exposure

Full text of hazard statements listed in Section 3

H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Comments

Use only in accordance with label instructions.

The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation. The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations. The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the storage and transportation of the preparation. The information in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by STV International Ltd for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.