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Supersedes: SDS dated 15th June 2015

SAFETY DATA SHEET

Conforms to Regulation EC 1907/2006 (REACH)

ZER 906 - Zero In Fly and Wasp Killer Spray

1. INDENTIFICATION OF THE SUBSTANCE/PREPARARTION AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name ZER 906 - Zero In Fly and Wasp Killer Spray

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

Suitable Uses For use as an insecticide

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

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

1.4. Emergency telephone number.

Telephone + 44 (0) 1953 881 580 (Office hours only)

2. HAZARDS IDENTIFICATION.

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) 1272/2008 [CLP]

Extremely flammable aerosol	Category 1	H222	Extremely flammable aerosol.
		H229	Pressurised container: May burst if heated.
Aquatic Acute Toxicity	Category 1	H400	Very toxic to aquatic life.
Aquatic Chronic Toxicity	Category 1	H410	Very toxic to aquatic life with long lasting effects.

2.2 Label elements.

Zero In Fly and Wasp Killer Spray

Hazard Pictograms

GHS 02

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

P101 If medical advice is needed, have product container or label to hand
P102 Keep out of the reach of children
P103 Read Label before use
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.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 ºC/122 ºF.
P501 Dispose of contents/container in accordance with local/national regulations.

This product is registered under the Control of Pesticides Regulations 1986. This may lead to variations between the precautionary statements list above and those on the product label.

2.3. Other Hazards

EUH208 Contains permethrin. May produce an allergic reaction.

Mixture meets the criteria for PBT according to Regulation EC 1907/2006, Annex III. No

Mixture meets the criteria for vPvB according to Regulation EC 1907/2006, Annex III. No

3. COMPOSITION / INFORMATION ON INGREDIENTS.

3.2 Mixtures:

Chemical Name	CAS No./ EC No.	CLP Annex VI index no. (if any)	Pictogram(s) according to 1272/2008:	H-phrase(s) according to 1272/2008:	Conc. [%]
n-Butane, Isobutane, Propane mixture	68476-85-7/ 270-704-2	649-202-00-6	GHS02 	Extremely flammable aerosol 1; H222	35.0
Odourless Kerosene	64742-47-8/ 265-149-8	649-422-00-2	GHS08 	Asp. Tox. 1; H304	7.40
Piperonyl Butoxide	51-03-6/ 200-076-7	-	GHS09 	Aquatic Acute 1, H400 Aquatic Chronic 1; H410	0.75
Tetramethrin	7696-12-0/ 231-711-6	-	GHS09 	Aquatic Acute 1, H400 Aquatic Chronic 1; H410	0.13
Sodium nitrite	7632-00-0/ 231-555-9	007-010-00-4	GHS03  GHS06  GHS09 	Oxidising Solid 3, H272 Acute Tox. 3 (oral), H301 Aquatic Acute 1, H400	0.10
Permethrin	52645-53-1/ 258-067-9	613-058-00-2	GHS07  GHS09 	Acute Tox. 4 (oral), H302 Acute Tox. 4 (inhal), H332 Skin Sens. 1; H317 Aquatic Acute 1, H400 Aquatic Chronic 1; H410 M=1,000	0.03

Full R-phrases and H-statements used in this section can be found in section 16.
Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES.

4.1. Description of first aid measures

Inhalation	Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. 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. immediately. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion	Wash out mouth with water. Move exposed person to fresh air. 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.
Skin Contact	Wash contaminated skin with plenty of soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye Contact	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. Get medical attention if irritations occurs.

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

See section 11 for more detailed information on health effects and symptoms

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

See section 11 for more detailed information on health effects and symptoms

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5. FIRE-FIGHTING MEASURES

5.1. Extinguishing Media.

Suitable extinguishing media	Use water spray (fog), alcohol-resistant foam, dry chemical or CO2
Unsuitable extinguishing media.	High volume water jet.

5.2. Special hazards arising from substance or mixture.

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion product	Dangerous gases are evolved in the event of fire.

5.3. Advice for fire-fighters.

Special precautions for Fire-fighters.	Promptly isolate the scene by removing all persons from the Vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Special Protective Equipment for Fire-Fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.	**CONTAINS EXTEMELY FLAMMABLE CONTENTS UNDER PRESSURE.** No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. When dealing with spillage to not eat, drink or smoke. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
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). Very toxic to aquatic organisms. Environmental agency emergency phone number 0800 807060.

6.3. Methods and materials for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
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.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling.	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.
7.2. Conditions for safe storage, including any incompatibilities.	Store between the following temperatures: 5 to 40°C Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well Ventilated area, away from incompatible materials (see section 10) Keep away from food drink and animal feedstuffs. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3. Specific use(s).

Recommendations Industrial sector specific Solutions	For use as an insecticide.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Workplace exposure Limits as defined by UK HSE in document EH40/2005 where available:

Substance	**CAS number**	**Workplace Exposure Limit**				**Comments**
		Long-term exposure limit (8-hr TWA reference period)		**Short-term exposure limit (15 minute reference period)**		**The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to the substances identified in IOELV Directives**
		ppm	**mg.m^{-3}**	**ppm**	**mg.m^{-3}**	
Liquefied petroleum gas	68476-85-7	1000	1750	1250	2180	Carc (only applies if LPG contains more than 0.1% of buta-1,3-diene)

Recommended monitoring procedures.

If product contains component(s) with exposure limits, personal workplace, atmospheric or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use protective respiratory equipment. Reference should be made to European standard EN689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2. Exposure Controls.

Risk management measures / Occupational exposure controls.

Technical measures

If user operations generate dust, fumes, gas, vapour or mist use Process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended statutory limits.

Personal protection measures.

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.

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 product change gloves immediately and

dispose of them according to relevant national and local regulations.
Recommended : (<1 hour) PVC , Nitrile gloves.

Eye Protection	**Eye protection not normally required.** Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid splashes, mists, gases or dusts. Recommended : Tightly fitting safety glasses/goggles.
Skin protection	**Skin protection not normally required.** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended : Wear protective clothing.
Hygiene Measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, drinking, smoking and using the lavatory at the end of a working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Environmental exposure controls

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

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties.

Physical Form: Aerosol Container/Spray
Colour: N/A
Odour: Characteristic
Odour threshold: N/A
pH: 6 - 8
Melting Point/freezing point: N/A
Boiling Point: N/A
Flash Point: < - 60 °C (Propellant)
Evaporation rate: N/A
Flammability: Extremely flammable
Vapour Pressure: 4 bar at 25 C
Vapour density: N/A
Density: 0.95 – 1.00 g/ml
Water Solubility: Not determined
Other Solubility: Not determined
Partition Coefficient: Not determined
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: N/A
Explosive properties: N/A

Oxidising properties: N/A

9.2. Other Information.

No additional information.

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10. STABILITY AND REACTIVITY

10.1. Reactivity	No specific product data
10.2. Chemical stability	Product is stable
10.3 Possibility of hazardous reactions.	Under normal conditions of storage and use hazardous reactions will not occur.
10.4. Conditions to Avoid	Avoid release to the environment. Extremes of heat and direct sunlight.
10.5. Incompatible materials	No specific product data.
10.6. Hazardous decomposition products.	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects.

The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards are given in section 3

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 causing skin sensitisation.
Germ cell mutagenicity:	No information specified.
Carcinogenicity:	No information specified.
Reproductive toxicity:	No information specified.
STOT-single exposure:	No information specified.
STOT-repeated exposure:	No information specified.
Aspiration hazard:	No information specified.

Toxicological information on hazardous ingredients where available:
n-Butane, Isobutane, Propane mixture
Likely Routes of Exposure:
Inhalation is the primary route of exposure although exposure may occur through skin or eye contact.
Acute Oral Toxicity: Not applicable.
Acute Dermal Toxicity: Not applicable.
Acute Inhalation Toxicity: Low toxicity: LC50 >20 mg/l / 4.00 h, Rat
Skin Corrosion/Irritation: Not irritating to skin.
Serious Eye Damage/Irritation: Essentially non-irritating to eyes.
Respiratory Irritation: Inhalation of vapours or mists may cause irritation to the respiratory system.
Respiratory or Skin Sensitisation: Not expected to be a sensitiser.
Aspiration Hazard: Not considered an aspiration hazard.
Germ Cell Mutagenicity: No evidence of mutagenic activity.
Carcinogenicity: Not expected to be carcinogenic.
Reproductive and Developmental Toxicity: Not expected to impair fertility. Not a developmental toxicant.
Specific target organ toxicity - single exposure: High concentrations may cause central nervous system

depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Specific target organ toxicity – repeated exposure:
Low systemic toxicity on repeated exposure.
Additional Information: Rapid release of gases which are liquids under pressure may cause frost burns of exposed tissues (skin, eye) due to evaporative cooling. High gas concentrations will displace available oxygen from the air; unconsciousness and death may occur suddenly from lack of oxygen. Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

Source: SDS AvantiGas Specialised Hydrocarbon Aerosol Propellant, Avanti Gas Limited 30.11.2011

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12. ECOLOGICAL INFORMATION

12.1. Toxicity.
Mixture is classified as 'Very toxic to aquatic life with long lasting effects'

Toxicity of ingredients where available:
Tetramethrin
Very toxic to aquatic life with long lasting effects.
Acute Toxicity - Fish
LC50 96 hours = 0.0037 mg/l Onchorhynchus mykiss (Rainbow trout)
Acute Toxicity - Aquatic Invertebrates
EC50 48 hours = 0.045 mg/l Daphnia

Source: SDS Tretramethrin, Deeval Ltd 01.06.17.

12.2. Persistence and degradability
Information not available.
12.3. Bioaccumulative potential
No information.

12.4. Mobility in soil.
No information.

12.5. Results of PBT and vPvB assessment.
No Chemical Safety Report has been prepared.

12.6. Other Adverse effects.
No information.

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13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product

Methods of disposal	Dispose of contents/container in accordance with all local, regional, national and international regulations. Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled and disposed of according to relevant national and local

	regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is the amongst the tasks of the polluter to assign the waste codes specific to industrial sectors and processes according to the European Waste List (EWL)
Hazardous waste	The classification of the product may meet the criteria for a hazardous waste.

Packaging

Method of disposal	Small containers (< 10 L or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer/ mixing tank at time of filling. Dispose of empty and cleaned packaging safely. Large containers (> 25 l or > 25 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer/ mixing tank at time of filling. Follow advice on product label and/or leaflet.
Special precautions	This material and its container must be disposed of in a safe way. Car should be taken when handling damaged or contaminated packaging. Avoid dispersal of spilt material and run off and contact with soil, waterways, drains and sewers.
Waste key for the unused Product	020108 Agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN Number	UN1950
ADR Class	2.1
Packaging Group	None
Proper Shipping Name	Aerosols

IMDG

UN Number	UN1950
ADR Class	2.1
Packaging Group	None
Marine Pollutant	Not applicable
Proper Shipping Name	Aerosols

IATA

UN Number	UN1950
ADR Class	2.1
Packaging Group	None
Proper Shipping Name	Aerosols.

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.

Annex XIV - List of substances subject to authorisation

Substances of very high concern.	None of the components are listed
Annex XVII - **(Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles).**	Not applicable
15.2. Chemical safety assessment	A Chemical Safety Assessment is not required for this mixture.

16. OTHER INFORMATION

Abbreviations and acronyms.

Acute Tox. 3 (oral) – Acute Toxicity Category 3 (oral)
Acute Tox. 4 (oral) – Acute Toxicity Category 4 (oral)
Acute Tox. 4 (inhalation) – Acute Toxicity Category 4 (inhalation)
Asp. Tox. 1 – Aspiration Toxicity Category 1
EC/LC50 – Lethal Concentration 50%
PBT - Persistent, Bioaccumulative and Toxic
vPvB - Very persistent and very Bioaccumulative

Other Hazard Information assigned to individual ingredients, but not carried to final classification:

H272 May intensify fire; oxidiser
H301 Toxic if swallowed
H302 Harmful if swallowed
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.

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 Limited 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.