FIK Flying Insect Killer
Safety Data Sheet

SECTION 1: Product and company identification

Product name	:	FIK Flying Insect Killer
Use of the substance/mixture	:	Aerosol Insecticide
Product code	:	8405
Company	:	Total Solutions P.O. Box 240014 Milwaukee, WI 53224 - USA T (414) 354-6417
Emergency number	:	Chemtec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Aerosol 1 H222

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Extremely flammable aerosol

Precautionary statements (GHS-US) : Keep away from heat, sparks, open flames, hot surfaces. - No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
butane	(CAS No) 106-97-8	10 - 20	Flam. Gas 1, H220 Compressed gas, H280
propane	(CAS No) 74-98-6	10 - 20	Flam. Gas 1, H220 Compressed gas, H280
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS No) 64742-47-8	2.5 - 10	Flam. Liq. 4, H227 Asp. Tox. 1, H304
TETRAMETHRIN	(CAS No) 7696-12-0	0.1 - 1	Not classified
d-Phenothrin	(CAS No) 26002-80-2	0.1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 STOT SE 3, H335

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse skin with water/shower.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries : May cause drowsiness or dizziness. Direct contact with the eyes is likely irritating.

Symptoms/injuries after inhalation : No effects known.

Symptoms/injuries after skin contact : No effects known.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely irritating.

Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Dry chemical powder. Carbon dioxide.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Contents under pressure. Pressurized container: may burst if heated.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Use water spray or fog for cooling exposed containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate unnecessary personnel. Stay upwind/keep distance from source. Gas is denser than air. May accumulate in low areas e.g. close to the ground. Eliminate every possible source of ignition.

6.1.1. For non-emergency personnel

Protective equipment : Do not enter without an appropriate protective equipment. DO NOT touch spilled material.

Emergency procedures : Ventilate the area thoroughly, especially low lying areas (basements, work pits etc.). Advice local authorities if considered necessary.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent runoff from entering drains, sewers or waterways. Avoid discharge to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Eliminate every possible source of ignition. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if safe to do so. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent the product from entering drains or confined areas. For further information refer to section 8 : Exposure-controls/personal protection"".

Methods for cleaning up : Take up liquid spill into absorbent material.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling : Do not use if spray button is missing or defective. Do not spray on a naked flame or any incandescent material. Do not smoke while handling product. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Do not re-use empty containers. Avoid breathing dust, fume, gas, mist, spray, vapors. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required.

Hygiene measures : Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Pressurized container. Do not puncture, incinerate or crush. Take precautionary measures against static discharge.

Storage conditions	:	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Refrigerate.
Incompatible products	:	Nitrates. fluorine. Chlorine. Strong oxidizing agents.
Incompatible materials	:	Heat sources. Sources of ignition.
Heat-ignition	:	KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Storage area	:	Aerosol 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butane (106-97-8)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
ACGIH	ACGIH STEL (ppm)	1000 ppm

propane (74-98-6)		
ACGIH	ACGIH TWA (ppm)	1000 ppm
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment : Gloves. Protective clothing. Safety glasses.

Hand protection	:	Protective gloves.
Eye protection	:	Chemical goggles or safety glasses.
Skin and body protection	:	Wear suitable protective clothing.
Respiratory protection	:	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
Thermal hazard protection	:	Use appropriate personal protective equipment when risk assessment indicates this is necessary.
Consumer exposure controls	:	When using do not smoke. Use good personal hygiene practices. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Gas
Appearance	:	Aerosol. Clear, colorless liquid.
Odor	:	No data available on odor
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	230.2 °F estimated
Flash point	:	-156 °F Propellant estimated
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Vapor pressure	:	No data available
Relative density	:	No data available
Relative vapor density at 20 °C	:	No data available
Specific gravity / density	:	0.866 g/ml estimated

Solubility	:	Not determined.
Log Pow	:	No data available
Log Kow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
VOC content	:	Not Determined

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerization does not occur.

10.4. Conditions to avoid
Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.

10.5. Incompatible materials
Nitrates. Fluorine. Chlorine. Strong oxidizing agents.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Literature)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential Adverse human health effects and symptoms	:	Dizziness. Direct contact with the eyes is likely irritating.
Symptoms/injuries after inhalation	:	No effects known.
Symptoms/injuries after skin contact	:	No effects known.
Symptoms/injuries after eye contact	:	Direct contact with the eyes is likely irritating.
Symptoms/injuries after ingestion	:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Likely routes of exposure	:	Skin and eyes contact.

SECTION 12: Ecological information

12.1. Toxicity

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

12.2. Persistence and degradability

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Persistence and degradability	Readily biodegradable in water. Adsorbs into the soil.

12.3. Bioaccumulative potential

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Log Pow	6 - 8.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Collect and reclaim or dispose in sealed containers at licensed waste disposal site Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container to comply with local/regional/national/international regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Empty containers should be taken for recycle, recovery or waste in accordance with local regulation. Handle empty containers with care because residual vapors are flammable. Handle unclean empty containers as full ones. Do not re-use empty containers.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description : UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1

UN-No.(DOT) : UN1950

Proper Shipping Name (DOT) : Aerosols
flammable, (each not exceeding 1 L capacity)

Transport hazard class(es) (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas

Marine pollutant : Yes (IMDG only)

DOT Packaging Non Bulk (49 CFR 173.xxx) : None

DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Special Provisions (49 CFR 172.102) : N82

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg

DOT Vessel Stowage Location : A

DOT Vessel Stowage Other : 25 - Shade from radiant heat,87 - Stow ‘‘separated from’’ Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Additional information

Other information : This product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.306.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : UN1950

Proper Shipping Name (IMDG) : Aerosols

Class (IMDG) : 2.1 - Flammable gases

Air transport

UN-No.(IATA)	:	UN1950
Proper Shipping Name (IATA)	:	Aerosols
Class (IATA)	:	2.1 - Gases : Flammable

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

TETRAMETHRIN	CAS No 7696-12-0	0.1 - 1

butane (106-97-8)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	

propane (74-98-6)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	

TETRAMETHRIN (7696-12-0)	
Listed on SARA Section 313 (Specific toxic chemical listings)	

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

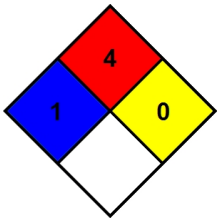
Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 4	Flammable liquids Category 4
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H227	Combustible liquid
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H332	Harmful if inhaled
H335	May cause respiratory irritation

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.