

**SECTION 1: Product and company identification**

Product name : CIK  
 Use of the substance/mixture : Insecticide  
 Aerosol  
 Product code : 8407  
 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  
 Skin Sens. 1 H317  
 Asp. Tox. 1 H304

Full text of H-phrases: see section 16

**2.2. Label elements**

**GHS-US labeling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Extremely flammable aerosol  
 May be fatal if swallowed and enters airways  
 May cause an allergic skin reaction

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  
 Avoid breathing gas  
 Contaminated work clothing must not be allowed out of the workplace  
 Avoid release to the environment  
 Wear protective gloves  
 If swallowed: Immediately call a doctor, a POISON CENTER  
 If on skin: Wash with plenty of water  
 Do NOT induce vomiting  
 If skin irritation or rash occurs: Get medical advice/attention  
 Store locked up  
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F  
 Dispose of contents/container to comply with local/regional/national/international regulations  
 Collect spillage

**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)
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS No) 64742-47-8	90 - 100	Flam. Liq. 4, H227 Asp. Tox. 1, H304
carbon dioxide, liquefied, under pressure	(CAS No) 124-38-9	2.5 - 10	Not classified

Name	Product identifier	%	Classification (GHS-US)
permethrin (ISO), m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	(CAS No) 52645-53-1	0.1 - 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317
PIPERONYL BUTOXIDE	(CAS No) 51-03-6	0.1 - 1	Not classified
TETRAMETHRIN	(CAS No) 7696-12-0	0.1 - 1	Not classified

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Take off immediately all contaminated clothing. If you feel unwell, seek medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. show this sheet where possible. Keep victim warm and rested. Wash contaminated clothing before reuse.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Artificial respiration and/or oxygen if necessary. Do not apply mouth-to-mouth resuscitation. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve of other proper respiratory medical device. Immediately consult a doctor/medical service.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Get immediate medical advice/attention. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse.
- 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. Get immediate medical advice/attention.
- First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth.

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

- Symptoms/injuries after inhalation : Prolonged exposure: danger of damage to health through inhalation.
- Symptoms/injuries after skin contact : Dermatitis. Skin rash/inflammation. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely irritating.
- Symptoms/injuries after ingestion : Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of lung edema.

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

Treat symptomatically. Keep watching the victim. Symptoms may be delayed.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Powder. Alcohol-resistant foam. Water fog. 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 : Contains gas under pressure; may explode if heated.
- Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Advice for firefighters

- Firefighting instructions : In case of fire and/or explosion do not breathe fumes. Move containers away from the fire area if this can be done without risk. NEVER direct water jet on liquid. 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. Some of these materials, if spilled, may evaporate leaving a flammable residue.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Consider initial downwind evacuation for at least 500 meters (1/3 mile). 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. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Do not enter without an appropriate protective equipment. Do not breathe gas/vapor. DO NOT touch spilled material. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Emergency procedures : Ventilate the area thoroughly, especially low lying areas (basements, work pits etc.). Advise local authorities if considered necessary.

#### 6.1.2. For emergency responders

No additional information available

**6.2. Environmental precautions**

Avoid discharge to the environment. Do not contaminate water with the product or its container. Do not allow to enter drains or water courses.

**6.3. Methods and material for containment and cleaning up**

- For containment : Eliminate every possible source of ignition. NO open flames, NO sparks, and NO smoking. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Form with air vapors (heavier than air) who stay on the floor. Gas is denser than air. May accumulate in low areas e.g. close to the ground. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if safe to do so. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to disperse the vapors. Isolate area until gas has dispersed.
- Methods for cleaning up : Following product recovery, flush area with water. Clean thoroughly. Dispose as hazardous waste. Reference to other sections (13).

**6.4. Reference to other sections**

No additional information available

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

- Precautions for safe handling : Vapors may form explosive mixture with air. Exclude sources of heat, sparks and open flame. Pressurized container: Do not pierce or burn, even after use. 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. . Use only explosion-free electrical equipment with earth. Do not re-use empty containers. Obtain special instructions before use. Reduce/avoid exposure and/or contact. Do not breathe gas/vapor/aerosol. Avoid contact with skin, eyes and clothing. Avoid prolonged and repeated contact with skin. Use only outdoors or in a well-ventilated area. Wear recommended personal protective equipment.
- Hygiene measures : Wash thoroughly after handling. Use good personal hygiene practices.

**7.2. Conditions for safe storage, including any incompatibilities**

- Technical measures : Do not puncture, incinerate or crush. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Store locked up.
- Incompatible products : Refer to Section 10 on Incompatible Materials.
- Incompatible materials : Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.
- Storage area : Aerosol 3. Store in a cool area.
- Special rules on packaging : meet the legal requirements.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

carbon dioxide, liquefied, under pressure (124-38-9)		
ACGIH	ACGIH TWA (ppm)	5000 ppm (Carbon dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	30000 ppm (Carbon dioxide; USA; Short time value; TLV - Adopted Value)

**8.2. Exposure controls**

- Appropriate engineering controls : Provide sufficient air exchange and/or exhaust. 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. . Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Face shield. Protective clothing.



- Hand protection : In case of repeated or prolonged contact wear gloves.
- Eye protection : Avoid contact with eyes. Face shield.

Skin and body protection	: Avoid contact with skin. Wear chemical protective equipment that is specifically recommended by the manufacturer. Use of an impervious apron is recommended. It may provide little or no thermal protection.
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. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash before reuse.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Aerosol.
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 201.2 °F 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	: 6.1 - 6.78 atm
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 0.897 g/ml estimated
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: 200 °C estimated
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: < 20 cSt
Viscosity, dynamic	: No data available

## 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

Risk of explosion. Risk of ignition. Unstable. The product is stable at normal handling- and storage conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks. Incompatible materials. Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.

### 10.5. Incompatible materials

No additional information available

### 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 : Dermal: Not classified.

<b>CIK™ - Crawling Insect Killer</b>	
LD50 dermal rat	1974 mg/kg
LD50 dermal rabbit	1038.5883 mg/kg 24 hours estimated
LC50 inhalation rat (mg/l)	4.785 mg/l/4h estimated

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

<b>permethrin (ISO), m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified  
 Serious eye damage/irritation : Not classified  
 Respiratory or skin sensitization : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified

<b>permethrin (ISO), m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)</b>	
IARC group	3 - Not Classifiable

<b>PIPERONYL BUTOXIDE (51-03-6)</b>	
IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified  
 Specific target organ toxicity (single exposure) : Not classified  
 Specific target organ toxicity (repeated exposure) : Not classified  
 Aspiration hazard : May be fatal if swallowed and enters airways.  
 Symptoms/injuries after inhalation : Prolonged exposure: danger of damage to health through inhalation.  
 Symptoms/injuries after skin contact : Dermatitis. Skin rash/inflammation. May cause an allergic skin reaction.  
 Symptoms/injuries after eye contact : Direct contact with the eyes is likely irritating.  
 Symptoms/injuries after ingestion : Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Risk of lung edema.

**SECTION 12: Ecological information**

**12.1. Toxicity**

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

<b>carbon dioxide, liquefied, under pressure (124-38-9)</b>	
LC50 fish 1	35 mg/l (LC50; 96 h; Salmo gairdneri)

**12.2. Persistence and degradability**

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

<b>carbon dioxide, liquefied, under pressure (124-38-9)</b>	
Persistence and degradability	Biodegradability: not applicable. Not applicable (gas).
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

**12.3. Bioaccumulative potential**

<b>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics (64742-47-8)</b>	
Log Pow	6 - 8.2

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
carbon dioxide, liquefied, under pressure (124-38-9)	
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

**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. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. . Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Dispose of contents/container to comply with local/regional/national/international regulations.
- Additional information : Containers, or internal liners coming from a container, having contained this product are also considered as hazardous wastes. This material and its container must be disposed of in a safe manner. Empty containers should be taken for recycle, recovery or waste in accordance with local regulation. Handle unclean empty containers as full ones.

**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.

permethrin (ISO), m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	CAS No 52645-53-1	0.1 - 1
PIPERONYL BUTOXIDE	CAS No 51-03-6	0.1 - 1
TETRAMETHRIN	CAS No 7696-12-0	0.1 - 1

permethrin (ISO), m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (52645-53-1)
Listed on SARA Section 313 (Specific toxic chemical listings)
PIPERONYL BUTOXIDE (51-03-6)
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.

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**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:

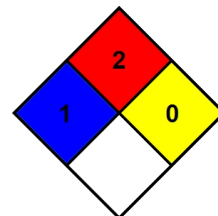
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Liq. 4	Flammable liquids Category 4
Skin Sens. 1	Skin sensitization Category 1
H222	Extremely flammable aerosol
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H317	May cause an allergic skin reaction
H332	Harmful if inhaled

# CIK

## Safety Data Sheet

**TOTAL**  
SOLUTIONS™

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.  
NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.  
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.*