



# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200



WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS Class D-2: Material causing other toxic effects.

HCS Class: Irritating substance. HCS Class: Target organ effects. HCS Class: Flammable aerosol.

WHMIS (Pictograms)

WHMIS (Classification)

HCS

## Section 1. Chemical Product and Company Identification

Product Name/ Trade name	<b>Residual Insecticide</b>	Code	<b>3601</b>
Synonym	Insecticide	CAS #	Mixture.
Chemical Family	Pesticide.	Validation Date	<b>12/5/2005</b>
Chemical Formula	Not applicable.	Print Date	12/5/2005
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (800) 333-2156	In Case of Emergency	CHEMTREC (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.		
DSL/ NDSL	All components listed unless noted elsewhere on this MSDS		
		<b>Protective Clothing</b> 	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Petroleum Distillates	64742-47-8	80 - 90	TWA: 100 ppm <b>OSHA (United States).</b>	Not available.
Propane	74-98-6	10 - 15	TWA: 300 ppm <b>OSHA (United States).</b>	Not available.
Butane	106-97-8	5 - 10	TWA: 1000 ppm Simple asphyxiant. <b>OSHA (United States).</b>	Not available.
Esfenvalerate	66230-04-4	0.1	TWA: 800 ppm Not available.	Not available.

## Section 3. Hazards Identification

Potential Acute Health Effects	Irritating to mouth, throat and stomach. Over exposure by inhalation May cause headache, dizziness and nausea.
Potential Chronic Health Effects	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. May aggravate existing respiratory conditions. May aggravate existing skin conditions. Repeated or prolonged exposure to the substance can produce nervous system damage. Asphyxiant Severe over-exposure can result in death.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

#### **Section 4. First Aid Measures**

<b>Eye Contact</b>	Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.
<b>Skin Contact</b>	Rinse skin with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Inhalation</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration., preferably mouth to mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Call a poison control center immediately for treatment advice. Do not give any fluid to the person. Do NOT induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

#### **Section 5. Fire Fighting Measures**

<b>Products of Combustion</b>	Not available.
<b>Fire Fighting Media and Instructions</b>	Use DRY chemicals, CO <sub>2</sub> , water spray or foam. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
<b>Special Remarks on Fire Hazards</b>	Container explosion may occur under fire conditions or when heated.
<b>Special Remarks on Explosion Hazards</b>	Not available.

#### **Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
<b>Large Spill and Leak</b>	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

#### **Section 7. Handling and Storage**

<b>Precautions</b>	Keep locked up. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
<b>Incompatibility</b>	oxidizing agents reducing agents
<b>Storage</b>	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 54.444°C (130°F). Dropping of containers may cause bursting

## Section 8. Exposure Controls/Personal Protection

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection

**Eyes** Safety glasses.

**Body** Long Sleeves and pants to avoid skin contact.

**Respiratory** Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

### Protective Clothing (Pictograms)



**Exposure Limits** See Section 2 For Applicable Exposure Limits

## Section 9. Physical and Chemical Properties

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Characteristic.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	Not available.	<b>Color</b>	Clear.
<b>Boiling/Condensation Point</b>	Not available.		
<b>Melting/Freezing Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	0.7396 (Water = 1)		
<b>Vapor Pressure</b>	Not available.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>VOC</b>	Not available.		
<b>Evaporation Rate</b>	<1 compared to Butyl acetate.		
<b>Dispersion Properties</b>	Not available.		
<b>Solubility</b>	Very slightly soluble in cold water, hot water.		
<b>The Product is:</b>	FLAMMABLE.		
<b>Auto-ignition Temperature</b>	Not available.		
<b>Flash Points</b>	Closed cup: 70.556°C (159°F).		
<b>Flammable Limits</b>	Lower: 1.8% Upper: 9.5%		

<b>Fire Hazards in Presence of Various Substances</b>	FLAMMABLE.
<b>Explosion Hazards in Presence of Various Substances</b>	Not available.

<b>Section 10. Stability and Reactivity Data</b>	
<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	oxidizing agents reducing agents
<b>Hazardous Decomposition Products</b>	Not available.

<b>Section 11. Toxicological Information</b>	
<b>Routes of Entry</b>	Not available.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): >2000 mg/kg [Rat]. Acute dermal toxicity (LD50): <2000 mg/kg [Rabbit]. Acute toxicity of the gas (LC50): 658 mg/m <sup>3</sup> 4 hour(s) [Rat]. (Butane ).
<b>Acute Effects on Humans</b>	<p><i>Eyes</i> Not available.</p> <p><i>Skin</i> Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.</p> <p><i>Inhalation</i> May be fatal if inhaled.</p> <p><i>Ingestion</i> Not available.</p>
<b>Chronic Effects on Humans</b>	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. May aggravate existing respiratory conditions. May aggravate existing skin conditions. Repeated or prolonged exposure to the substance can produce nervous system damage. Asphyxiant Severe over-exposure can result in death.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.

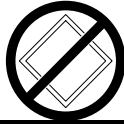
<b>Section 12. Ecological Information</b>	
<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Not available.
<b>Toxicity of the Products of Biodegradation</b>	Not available.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

### Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

### Section 14. Transport Information

DOT (U.S.A)  
(Pictograms)



TDG Classification - TDG Class 3.1: Flammable liquid with a flash point lower than -18°C (0°F).



PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not available.

### Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). WHMIS Class D-2: Material causing other toxic effects.



Regulatory Lists No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications  
HCS (U.S.A.) HCS Class: Irritating substance. HCS Class: Target organ effects. HCS Class: Flammable aerosol.

USA Regulatory Lists No products were found.

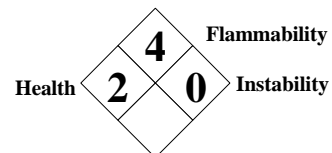
DSD (EEC) R20/21- Harmful by inhalation and in contact with skin.

International Regulations Lists No products were found.

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		4
Physical Hazard		0

National Fire Protection Association (U.S.A.)



The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Specific Hazard

**Section 16. Other Information**

Validated by CRushton on 12/5/2005.

Verified by CRushton.

Printed 12/5/2005.

**Information Contact** Betco Corporation  
1001 Brown Avenue  
Toledo, Ohio 43607

Notice to Reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

Validated on 12/5/2005.

***Residual Insecticide***

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