





Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

 WHMIS (Pictograms)	WHMIS Class D-2B: Material causing other toxic effects (TOXIC). WHMIS (Classification)	HCS Class: Irritating substance. HCS
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Section 1. Chemical Product and Company Identification

Product Name/ Trade name	Residual Insecticide Spray	Code	029
Synonym	Residual Insect Killer	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	3/20/2004
Chemical Formula	Not applicable.	Print Date	3/27/2004
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156	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		
		Protective Clothing 	

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
1) Liquified Petroleum Gas	68476-85-7	15-20	TWA: 1000 (ppm) TWA: 1000 (ppm) from OSHA (PEL) [United States]	Not available.
2) Petroleum Distillates	64742-48-9	5-10	TWA: 500 (ppm) TWA: 100 (ppm) from OSHA (PEL) [United States]	Not available.
3) Sodium Benzoate	532-32-1	<1	Not available.	Not available.
4) Piperonyl Butoxide	51-03-6	0.5	Not available.	Not available.
5) Pyrethrins	8003-34-7	0.1	TWA: 5 (mg/m ³) TWA: 5 (mg/m ³) from OSHA (PEL) [United States]	Not available.
6) Permethrin	52645-53-1	0.2	Not available.	Not available.

Section 3. Hazards Identification

Potential Acute Health Effects	No specific information is available in our database regarding the acute toxic effects of this material for humans.
Potential Chronic Health Effects	Over-exposure by inhalation may cause respiratory irritation. Repeated skin exposure can produce local skin destruction, or dermatitis.
Carcinogenic Effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	INDUCE VOMITING by sticking finger in throat. Have conscious person drink several glasses of water or milk. NEVER give an unconscious person anything to ingest. Seek immediate medical attention.

Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	Use water spray, fog or foam.
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	Heated cans may burst.

Section 6. Accidental Release Measures

Small Spill and Leak	Safety glasses.
Large Spill and Leak	Absorb with DRY earth, sand or other non-combustible material.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe gas, fumes, vapor or spray.
Incompatibility	Not available.
Storage	Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Keep out of the reach of children. Not for use or storage in or around the home.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Good general ventilation should be sufficient to control airborne levels.

Personal Protection

Eyes Safety glasses.

Body Lab coat.

Respiratory No special recommendations.

Hands Gloves (impervious).

Protective Clothing (Pictograms)



Exposure Limits**Liquified Petroleum Gas**

TWA: 1000 (ppm)

TWA: 1000 (ppm) from OSHA (PEL)

Petroleum Distillates

TWA: 500 (ppm)

TWA: 100 (ppm) from OSHA (PEL)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid. (Spray Mist)	Odor	Characteristic.
Molecular Weight	Not applicable.	Taste	Not available.
pH	Not available.	Color	Clear
Boiling/Condensation Point	N/A		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	Not available.		
Vapor Pressure	35 psig @ 68°F		
Vapor Density	>1 (Air = 1)		
Volatility	95		
VOC			
Evaporation Rate	>1		
Dispersion Properties	Not available.		
Solubility	Not available.		
The Product is:	May be combustible at high temperature.		
Auto-ignition Temperature	Not available.		
Flash Points	Not available.		
Flammable Limits	LOWER: 1.8% UPPER: 8.4%		
Fire Hazards in Presence of Various Substances	No specific information is available in our database regarding the flammability of this product in presence of various materials.		
Explosion Hazards in Presence of Various Substances	Explosive in presence of heat.		

Section 10. Stability and Reactivity Data

Stability The product is stable.

Incompatibility with Various Substances Not available.

Hazardous Decomposition Products Will not occur.

Section 11. Toxicological Information

Routes of Entry Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals LD50: Not available.
LC50: Not available.

Acute Effects on Humans

Eyes Slightly hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Skin Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation Hazardous in case of inhalation. May cause headache, dizziness.

Ingestion Harmful if swallowed. May cause gastrointestinal discomfort. Aspiration hazard if swallowed- can enter lungs and cause chemical pneumonitis.

Chronic Effects on Humans Over-exposure by inhalation may cause respiratory irritation. Repeated skin exposure can produce local skin destruction, or dermatitis.

Special Remarks on Toxicity to Animals No additional remark.

Special Remarks on Chronic Effects on Humans No additional remark.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation Not available.

Special Remarks on the Products of Biodegradation No additional remark.

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 Not controlled under TDG (Canada).



PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not applicable.

Section 15. Other Regulatory Information and Pictograms

WHMIS (Classification) WHMIS Class D-2B: Material causing other toxic effects (TOXIC).



Regulatory Lists No products were found.

Other Regulations Not available. or of its ingredients

Other Classifications

HCS (U.S.A.) HCS Class: Irritating substance.

USA Regulatory Lists

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Piperonyl Butoxide
SARA 313 toxic chemical notification and release reporting:
Piperonyl Butoxide; Pyrethrins

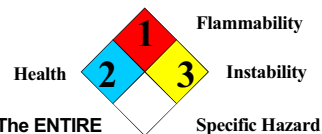
DSD (EEC) This product is not classified according to the EU regulations.

International Regulations Lists No products were found.

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

Health	2
Flammability	2
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.

Section 16. Other Information

Validated by CRushton on 3/20/2004.

Verified by CRushton.

Printed 3/27/2004.

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 3/20/2004.

Residual Insecticide Spray

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