



DATE: April 27, 2020

TO: Brenda J. Billingsley, Director, Purchasing Division

THRU: Mary Moss, Purchasing Agent, Purchasing Division

FROM: Adriana Toro, Acting Director, Highway and Bridge Maintenance Division

PROJECT TITLE: Mosquito Control Supplies (Non-Sheeltered Market)- Bid No. TBD

REQUISITION NO. TBD

SOLE SOURCE/SOLE BRAND REQUEST

I. REQUEST: Provide a description of the features of the product/service or Scope of Work.

Furnish and delivery of Mosquito Control products for the Broward County Highway and Bridge Maintenance Division- Mosquito Control Section and various other Broward County agencies that may have a need of these products in accordance with the specifications and in compliance with related codes and laws.

II. JUSTIFICATION: Please check all boxes that describe your reason(s) for determining that only one source or brand is reasonably available.

Only Sole Source/ Uniqueness

- Proprietary Item - this vendor/source has the only rights to provide this service or commodity. A letter from the manufacturer or authorizing entity is included in this request.
- Technology Improvements - updates or upgrades to an existing system, software, software as a service (SaaS), hardware purchases.
- Engineering Direction - engineering drawing or specification identifies product; "no substitutes or equivalents will be acceptable."
- Only qualified supplier - reliability and maintainability of the product or service would be degraded unless specified supplier is used; may void warranty. This request includes a copy of the current warranty information.
- Other/or Additional information - the County requires this sole source, sole brand purchase for the following reasons:

Refer to the Sole Source/ Sole Brand memo.

Business Case (One/Most Reasonable Source or One/Most Reasonable Brand)

- Operational Compatibility - replacement parts from alternate suppliers are not interchangeable with original part and causes equipment incompatibility. Previous findings and/or documentation is included with this request.
- Ease of Maintenance - maintenance or retooling prohibits competition. Section III, Comparative Market Research includes estimated costs associated with changing current source and/or brand.
- Follow-On - potential for continued development or enhancement with same supplier and eliminates costs incurred by using different supplier. Section III, Comparative Market Research includes estimated costs for replacing current or existing system.
- Complies with existing community and safety standards, and/or laws, rules, and regulations.
- Exempted from the Procurement Code - per Section 21.18 of Broward County Administrative Code.
- Other/or additional information - using this sole source, sole brand purchase benefits the County for the following reasons:

See Sole Sole/ Sole Brand memo attached

III. COMPARATIVE MARKET RESEARCH: Provide a detailed source or market analysis for justification of sole source/brand or most reasonable source (attach extra sheets as needed).

Estimated project value: 1,500,941.65 Contract length (if applicable): 1 year with two optional renewal

Expenses to date: 844,875.55

Has this commodity or service been previously provided to the County? Yes No

If yes, when and by whom? See below

How was item/service procured? Sole brand and sole source

What is the current contract (MA) or purchase order number? N2114084Q1_1

If this is a sole brand, is there an "authorized" dealers list? Yes No

Cost/Benefit Analysis: What would the cost be to utilize an alternate vendor or source? This explanation should include the savings and/or additional costs to the County by not using the preferred vendor or source. Attach additional sheets if needed.

These products have been previously provided to the County from Clarke Mosquito Control Product, Inc. under contract N2114084Q1_1

CERTIFICATION: I have thoroughly researched the sole source or sole brand justification and fully understand the implications of Section 838.22 of the Florida Statutes:

(2) "It is unlawful for a public servant, with corrupt intent to obtain a benefit for any person or to cause unlawful harm to another, to circumvent a competitive bidding process required by law or rule by using a sole source contract for commodities or services."

(5) "Any person who violates this section commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084"

REQUESTOR/EVALUATOR (PRINT)	REQUESTOR/EVALUATOR (SIGN)	DATE
Adriana Toro, Acting Division Director	ADRIANA TORO <small>Digitally signed by ADRIANA TORO Date: 2020.04.27 12:30:19 -04'00'</small>	April 27, 2020
DEPT/DIV DIRECTOR OR DESIGNEE (PRINT)	DEPT/DIV DIRECTOR OR DESIGNEE (SIGN)	DATE

The Purchasing Agent has reviewed the request and has completed the required due diligence per the Procurement Code Section(s) 21.34 and 21.35. The Purchasing Agent recommends the following:

Sole Source
 Sole Brand
 Reasonable Source
 RFI attached
 Rejected
 Request Authorization to Negotiate

Additional Information:

Request for Information (RFI) BLD2121227F1 - Mosquito Control Supplies, was posted from June 18, 2020 and opened on June 25, 2020 (Exhibit 1). The RFI was issued to see if there are additional distributors authorized to sell the mosquito control products specified as a sole source/brand in Exhibit 2. The RFI yielded three (3) responses, in which Duplex™ G can only be distributed by the following vendors: Target Specialty Products, Clarke Mosquito Control Supplies, Inc., Univar, Van Diest Supply Company. Based on the RFI, there was no responses for CocoBear™, Duet® Dual action, Duet HD, Aqua Duet®, and Natular®, which indicates there are no additional vendors authorized to sell the identified sole source/sole brand mosquito products. Furthermore, Adapco, LLC responded to the RFI with a product called PCT 3-15, which is an equivalent to Biomist 3-15. The Highway & Bridge Maintenance Division's (HBMD) Contract Administrator, stated "We solicited for Biomist 3+15, which has been used as an adulticide for several years by Highway and Bridge Maintenance Division- mosquito Control. Currently, our spray equipment are calibrated for Biomist 3 +15. If we changed from Biomist 3+15 to the PCT 3+15, it will require recalibration of our spray equipment as well as removal of any existing product from our storage tanks. The removal of this product, will require the hiring a licensed company to clean, remove any residual chemical and cleaning agent as well as proper disposal, as required by the U.S. Environmental Protection Agency and the chemical label. An acquisition of a such company, will require additional cost to our agency" (Exhibit 3). The Purchasing Agent agrees with the HBMD that the mosquito control supplies requested as a sole source and sole brand should continually be used to combat the mosquito population in Broward County. These products were tested by HBMD and have proven to be the most effective. Using multiple products maintains product diversity and prevents chemical resistance in the mosquito population of Broward County.

Exhibits

- Exhibit 1 - HBMD's Sole Source / Sole Brand Request Memorandum dated June 3, 2020
- Exhibit 2 - Request for Information (RFI) BLD2121227F1 - Mosquito Control Supplies

Exhibit 3 - Email Response from HBMD dated July 8, 2020

Purchasing Agent Signature: **MARY
MOSS**

Digitally signed by MARY
MOSS
Date: 2020.08.03
17:10:38 -04'00'

Date: 8/3/2020

APPROVAL AUTHORITY
REASON/SUGGESTED ACTION (IF DISAPPROVED):

[Empty box for approval authority]

Signature: **CARLA
BYRD**

Digitally signed by CARLA
BYRD
Date: 2020.08.03
17:15:32 -04'00'

Date: 8/3/2020

**BRENDA
BILLINGSLEY**

Digitally signed by
BRENDA BILLINGSLEY
Date: 2020.08.13
15:12:51 -04'00'



PUBLIC WORKS DEPARTMENT
HIGHWAY & BRIDGE MAINTENANCE DIVISION
1600 Blount Road • Pompano Beach, Florida 33069 • 954-357-6040 • FAX 954-357-6131

DATE: June 3, 2020
TO: Brenda J. Billingsley, Director, Purchasing Division
THRU: Mary Moss, Purchasing Agent
FROM: Adriana Toro, Acting Director, Highway and Bridge Maintenance Division

ADRIANA
TORO

**SUBJECT: Mosquito Control Supplies Sole Source / Sole Brand Request
(Non-Sheltered Market) - Bid No. TBD**

The Highway and Bridge Maintenance Division (HBMD) would like to request approval for the sole source/sole brand request for Mosquito Control products listed in the table below. These products have been historically used by HBMD Mosquito Control Section and have been proven effective to combat mosquitoes and mosquito larvae.

Product Name	Type of Request	Justification
CocoBear™	Sole Source and Sole Brand	CocoBear™ is a high performance larvicide that provides control during both the larvae and pupae stages of mosquitoes. It is exclusively manufactured and distributed by Clarke Mosquito Control Product Inc. (Refer to attached sole source letter).
Duet® Dual action, Duet HD, and Aqua Duet®	Sole Source and Sole brand	Duet® products are adulticides proven to quickly knockdown adult mosquitoes. The active ingredients are Prallethrin and Sumithrin which are safe to use outdoors in residential and recreational areas. This product is manufactured by MGK Insect Control Solutions and exclusively distributed by Clarke Mosquito Control Product Inc. (Refer to attached sole source letter).
Natular® DT, XRT, and 2 EC	Sole Source and Sole brand	Natular® products are larvicides that are effective on all four stages of mosquito larvae. The active ingredient, Spinosad, is derived from a naturally occurring soil bacterium. This product is manufactured by Corteva Agriscience and exclusively distributed by Clarke Mosquito Control Product Inc. (Refer to attached sole source letter.)
Biomist® 3+15	Sole Source and Sole brand	Biomist® is an Ultra-Low volume (ULV) adulticide approved for the control of adult mosquitoes in residential and recreational areas. This product is exclusively manufactured and distributed by Clarke Mosquito Control Product Inc. (Refer to attached sole source and sole brand letters.)

Product Name	Type of Request	Justification
Duplex™ G	Sole Brand	Duplex™ G is a dual action larvicide that delivers control through a combination of a biological control agent (<i>BTI</i>) and an extended residual biological insect growth regulator (S-Methoprene). The dual activity of this product prevents adult mosquito emergence. This product is manufactured by Wellmark International (DBA Central Life Sciences). This product is distributed by several vendors. (Refer to attached sole source letter).

Based on the information and justification presented here, HBMD requests the approval of the proposed sole source / sole brand products for the Mosquito Control Supply solicitation. If you have any questions or need additional information, please contact me at (954) 357-6064 or Cynthia Morales, Project Manager, at (954) 765-1540.

Thank you in advance for your consideration of this request.



675 Sidwell Court
St. Charles, IL 60174
630.894.2000 P
630.443.3070 F
www.clarke.com

1/31/2020

To whom it may concern,

This letter serves to confirm that Biomist 3+15 formulation is an exclusive U.S. EPA registration owned by and produced by Clarke. This is a uniquely synergized permethrin formulation and is not available elsewhere for public health mosquito control applications.

Please let us know if we can be of further assistance.

Cordially,

David McLaughlin
Vice President, Marketing



675 Sidwell Court
St. Charles, IL 60174
630.894.2000 P
630.443.3070 F
www.clarke.com

1/31/2020

To whom it may concern,

This letter serves to confirm that CocoBear larvicidal oil is an exclusive U.S. EPA registration owned by and produced by Clarke. This formulation is not available elsewhere for public health mosquito control applications.

Please let us know if we can be of further assistance.

Cordially,

David McLaughlin
Vice President, Marketing



January 1, 2020

Dear Sir or Madam:

This letter serves as confirmation that Clarke Mosquito Control is MGK's exclusive distributor for the following products in the United States for the year 2020:

AquaDuet™	EPA Reg. No. 1021-2562-8329
DUET™	EPA Reg. No. 1021-1795-8329
DUET™ HD	EPA Reg. No. 8329-105

These products contain proprietary active ingredient(s) and unique formulation technology that give the products superior performance. We have a long history of working with Clarke in this market. We find this arrangement gives us the best chance to reach customers with the support necessary to serve this market. Please let me know should you need further details.

Sincerely,

A handwritten signature in black ink that reads "Kevin P. Caskey". The signature is written in a cursive style.

Kevin P. Caskey
Vice President, Sales and Marketing

Wellmark International DBA

1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
847 330 5300

November 21, 2019

To: Altosid®, Zenivex®, Duplex®, Perm-X® and Pyronyl® Purchasers

Wellmark International (DBA Central Life Sciences) is the sole manufacturer of above referenced mosquito control product brands and markets direct to all U.S. end users via Agency Agreement or directly through authorized distribution. The Agency Agreement and distribution agreements we have in place for 2020 allows Central Life Sciences to sell to end-use public agencies through 6 authorized Agent/distributor companies.

During calendar year 2020, the following companies are authorized Central Life Sciences Agents allowed to advertise, promote, solicit and sell ALTOSID®, ZENIVEX®, DUPLEX®, PERM-X and PYRONYL products.

- Clarke Mosquito Control
- Target Specialty Products
- Univar
- Van Diest Supply Company
- Helena
- Winfield

Agent/Distributor specific authorizations:

- *Clarke, Target Specialty Products, Univar and Van Diest are authorized to sell Altosid®, Zenivex®, Duplex®, Perm-X® and Pyronyl® in the US.*
- *Helena and Winfield are only authorized to sell Perm-X® and Pyronyl® in the US.*

All inquires and/or purchases of ALTOSID®, ZENIVEX®, DUPLEX®, PERM-X® or PYRONYL® products can be made through the above cited companies with footnoted specific authorizations.

Regards,



John Neberz
Business Manager
847-330-5385
JNeberz@Central.com

JN/smc enclosure



Corteva Agrisciences
Agriculture Division of DowDuPont
9330 Zionsville Road Indianapolis, IN 46268 USA Tel 317 337 4337

www.corteva.com

January 20, 2020

To whom it may concern,

Please allow this letter to confirm that Corteva has granted Clarke Mosquito Control Products, Inc. exclusive rights to market its active ingredient spinosad for mosquito larval control products in the US territories, Caribbean and Cayman Islands for 2020. Corteva understands that spinosad is utilized in Clarke's Natular G, Natular G30, Natular G30 WSP, Natular T30, Natular XRT, Natular 2EC and Natular DT products.

Please let me know if you need further details.

Yours sincerely,

Lisa Bostock
Global Business Development Leader
Corteva Agrisciences
Agriculture Division of DowDuPont
317-337-4337

Broward County Board of
County Commissioners

BLD2121227F1

**Bid Tabulation Packet
for
Solicitation BLD2121227F1**

Request for Information: Mosquito Control Supplies

Bid Designation: Public



Broward County Board of County Commissioners

Broward County Board of
County Commissioners

BLD2121227F1

Bid #BLD2121227F1 - Request for Information: Mosquito Control Supplies

Creation Date **May 27, 2020**

End Date **Jun 25, 2020 2:00:00 PM EDT**

Start Date **Jun 18, 2020 3:30:04PM EDT**

Awarded Date **Not Yet Awarded**

BLD2121227F1--01-01 Request for Information: Mosquito Control Supplies					
Supplier	Unit Price	Qty/Unit	Total Price	Attch.	Docs
Target Specialty Products [Ad]	First Offer -	1 / n/a		Y	
Product Code:		Supplier Product Code: Duplex G			
Agency Notes:		Supplier Notes:			
dayrel cleaning service	First Offer -	1 / n/a			
Product Code:		Supplier Product Code:			
Agency Notes:		Supplier Notes:			
ADAPCO, LLC [Ad]	First Offer -	1 / n/a		Y	
Product Code:		Supplier Product Code: PCT315			
Agency Notes:		Supplier Notes: ADAPCO sells PCT 3-15 which is an equivalent to Biomist 3-15. Please see Label/SDS attached.			

Supplier Totals

f dayrel cleaning service	\$0.00
Bid Contact yenifer marrero Address 4955 nw 199st lot 29 dayrelcleaningservice@outlook.com miami, FL 33055 Ph 786-444-7030	
Bid Notes DAYREL CLEANING SERVICE We been in this business for 3 years now, throughout these years we have gained knowledge in many areas like hotel units cleaning, Overnight Cleaning, Windows Cleaning, Staffing, Kitchen Cleaning, Painting Labor, Office cleaning and many more. We are here to offer the best service based on quality and pricing. Through our Services Company, we provide the janitorial service to some of the finest venues and hotels in Miami-Dade and Broward County. It is the combination of knowledge and expertise acquired through our hands-on experience. The Company takes pride in offering its services with professionally trained and knowledgeable employees, a fully equipped cleaning team with top of the line equipment, supplies and time proven processes adds to our continued success. Professional employees are essential to provide quality services to maintain the high standards of each property. Our employees are an integral part of our success and with the quality service they provide they form part of our team, set out to deliver excellent service and personalized attention, while exceeding all expectations. Dayrel Cleaning Service is committed to satisfy your needs and guarantees successful results. We are in full compliance with all labor, state, federal and local laws and maintain liability, workers compensation and EPLI insurances up to date and readily available for review. We spend time with our employees to ensure that our staff has integrity and human quality. We take our job seriously and take our cleaning service to its perfection as well as in the various services that we offer. We and our staff remain in constant training. We make our staff aware of the important role we play in the properties since we are the face that the properties show the client and we offer attention 24/7 for any emergency.	

Agency Notes:

Supplier Notes:

**Head
Attch:**



DAYREL CLEANING SERVICE
We been in this business for 3 years now, throughout these years we have gained knowledge in many areas like hotel units cleaning, Overnight Cleaning, Windows Cleaning, Staffing, Kitchen Cleaning, Painting Labor, Office cleaning and many more. We are here to offer the best service based on quality and pricing.

Through our Services Company, we provide the janitorial service to some of the finest venues and hotels in Miami-Dade and Broward County. It is the combination of knowledge and expertise acquired through our hands-on experience.

The Company takes pride in offering its services with professionally trained and knowledgeable employees, a fully equipped cleaning team with top of the line equipment, supplies and time proven processes adds to our continued success.

Professional employees are essential to provide quality services to maintain the high standards of each property. Our employees are an integral part of our success and with the quality service they provide they form part of our team, set out to deliver excellent service and personalized attention, while exceeding all expectations.

Dayrel Cleaning Service is committed to satisfy your needs and guarantees successful results. We are in full compliance with all labor, state, federal and local laws and maintain liability, workers compensation and EPLI insurances up to date and readily available for review.

We spend time with our employees to ensure that our staff has integrity and human quality. We take our job seriously and take our cleaning service to its perfection as well as in the various services that we offer. We and our staff remain in constant training.

We make our staff aware of the important role we play in the properties since we are the face that the properties show the client and we offer attention 24/7 for any emergency.

f Target Specialty Products [Ad]

\$0.00

Bid Contact **Rita Rafferty**
marty.shuster@target-specialty.com
Ph 800-352-5548

Address **15415 Marquardt Avenue**
Santa Fe Springs, CA 90670

Broward County Board of
County Commissioners

BLD2121227F1

Agency Notes:	Supplier Notes:	Head Attch:
f ADAPCO, LLC [Ad]		\$0.00
Bid Contact Kathy Russell bids@myadapco.com Ph 800-367-0659	Address 550 Aero Lane Sanford, FL 32771	
Supplier Code VC0000026426		
Bid Notes ADAPCO sells PCT 3-15 which is an equivalent to Biomist 3-15. Please see Label/SDS attached.		
Agency Notes:	Supplier Notes: ADAPCO sells PCT 3-15 which is an equivalent to Biomist 3-15. Please see Label/SDS attached.	Head Attch: 

**

dayrel cleaning service

Bid Contact **yenifer marrero**
dayrelcleaningservice@outlook.com
Ph 786-444-7030

Address **4955 nw 199st lot 29**
miami, FL 33055

Bid Notes **DAYREL CLEANING SERVICE**

We been in this business for 3 years now, throughout these years we have gained knowledge in many areas like hotel units cleaning, Overnight Cleaning, Windows Cleaning, Staffing, Kitchen Cleaning, Painting Labor, Office cleaning and many more. We are here to offer the best service based on quality and pricing. Throughour Services Company, we provide the janitorial service to some of the finest venues and hotels in Miami-Dade and Broward County. It is the combination of knowledge and expertise acquired through our hands-on experience.

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We make our staff aware of the important role we play in the properties since we are the face that the properties show the client and we offer attention 24/7 for any emergency.

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch. Docs
BLD2121227F1--01-01	Request for Information: Mosquito Control Supplies	Supplier Product Code:	First Offer -	1 / n/a	
				Supplier Total	\$0.00

Broward County Board of
County Commissioners

BLD2121227F1

Target Specialty Products

Bid Contact **Rita Rafferty** Address **15415 Marquardt Avenue**
marty.shuster@target-specialty.com **Santa Fe Springs, CA 90670**
Ph 800-352-5548

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch. Docs
	BLD2121227F1--01-01 Request for Information: Mosquito Control Supplies	Supplier Product Code: Duplex G	First Offer -	1 / n/a	Y
Supplier Total					\$0.00

Broward County Board of
County Commissioners

BLD2121227F1

Target Specialty Products

Item: **Request for Information: Mosquito Control Supplies**

Attachments

CLS Sole Source Letter.pdf

Broward County Board of
County Commissioners

BLD2121227F1

Wellmark International DBA



1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
847 330 5300

January 1, 2020

To: Altosid®, Zenivex®, Duplex®, Strike®, Perm-X® and Pyronyl® Purchasers

Wellmark International (DBA Central Life Sciences) is the sole manufacturer of above referenced mosquito control product brands and markets direct to all U.S. end use customers via Agency Agreement or directly through authorized distribution. The Agency Agreement and distribution agreements we have in place for 2020 allows Central Life Sciences to sell to end-use public agencies through 6 authorized Agent/distributor companies.

During calendar year 2020, the following companies are authorized Central Life Sciences Agents allowed to advertise, promote, solicit and sell ALTOSID®, ZENIVEX®, DUPLEX®, Strike®, PERM-X and PYRONYL products.

- Clarke
- Target Specialty Products
- Univar
- Van Diest Supply Company
- Helena
- Winfield

Agent/Distributor specific authorizations:

- *Clarke, Target Specialty Products, Univar and Van Diest are authorized to sell Altosid®, Zenivex®, Duplex®, Strike®, Perm-X® and Pyronyl® in the US.*
- *Helena and Winfield are only authorized to sell Perm-X® and Pyronyl® in the US.*

All inquiries and/or purchases of ALTOSID®, ZENIVEX®, DUPLEX®, STRIKE®, PERM-X® or PYRONYL® products can be made through the above cited companies with footnoted specific authorizations.

Regards,

A handwritten signature in black ink, appearing to read 'John Neberz'.

John Neberz
Business Manager
847-330-5385
JNeberz@Central.com

JN/smc enclosure

Broward County Board of
County Commissioners

BLD2121227F1

ADAPCO, LLC

Bid Contact **Kathy Russell** Address **550 Aero Lane**
bids@myadapco.com **Sanford, FL 32771**
Ph 800-367-0659

Supplier Code VC0000026426

Bid Notes **ADAPCO sells PCT 3-15 which is an equivalent to Biomist 3-15. Please see Label/SDS attached.**

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch. Docs
BLD2121227F1--01-01	Request for Information: Mosquito Control Supplies	Supplier Product Code: PCT315 Supplier Notes: ADAPCO sells PCT 3-15 which is an equivalent to Biomist 3-15. Please see Label/SDS attached.	First Offer -	1 / n/a	Y

Supplier Total **\$0.00**

Broward County Board of
County Commissioners

BLD2121227F1

ADAPCO, LLC

Item: **Request for Information: Mosquito Control Supplies**

Attachments

PCT 3-15 L-SDS.pdf

PCT 2020 Pursuit PCT 315 SeaseUC Sole Source Letter 06-01-2020.pdf

Broward County Board of
County Commissioners

BLD2121227F1

PCT 3-15 ULV

For Use Outdoors as an Ultra-Low Volume (ULV) Application to Control Adult Mosquitoes in Residential and Recreational Areas. Also For Use Against Biting and Non-Biting Midges and Blackflies.

[For Aerial or Ground Application]

[For the control of adult mosquitoes within or adjacent to listed growing crops and range grasses]

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision.

Active Ingredients:

Permethrin (3-Phenoxyphenyl) methyl (+/-) cis,	
trans-3-(2,2-dichlorethyl)-2,2-dimethyl cyclopropanecarboxylate	3.0%
Piperonyl Butoxide *	15.0%
Other Ingredients: **	82.0%
Total:	100.0%

Contains 0.222 pounds of Permethrin and
1.113 pounds of Piperonyl Butoxide [PBO] per gallon

* PBO (butyl carbityl) (6-propylpiperonyl) ether and related compounds.

** Contains petroleum distillate

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Manufactured For
Precision Control Technology
550 Aero Lane
Sanford, FL 32771

EPA Reg. No.: 86291-XX
EPA Est. No.: _____

NET CONTENTS: _____
LOT NO.: _____

FIRST AID	
IF SWALLOWED:	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call a poison control center or doctor for treatment advice.
Have product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.	
NOTE TO PHYSICIAN: Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are: barrier laminate, nitrile rubber, neoprene rubber, or Viton.

Mixers, loaders, applicators, and other handlers must wear: long-sleeve shirt and long pants, shoes plus socks.

In addition, all handlers except for applicators using motorized ground equipment, pilots and flaggers, must wear chemical-resistant gloves. In addition, mixers/loaders, persons cleaning equipment, and other persons exposed to the concentrate must wear a chemical-resistant apron. See engineering controls for additional requirements.

User Safety Requirements: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Engineering Controls: Pilots must use an enclosed cockpit that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or wash waters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes, or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Not for use in metered release systems.
Not for use in outdoor residential misting systems.
Do not contaminate crop land (other than crops listed), or potable water supplies with spray drift.
Do not make applications during rain.

USE INFORMATION

PCT 3-15 ULV is approved for applications as an ultra low volume (ULV) nonthermal aerosol (cold fog) to control adult mosquitoes in residential and recreational areas and other areas these insects occur, such as but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas and municipalities, gardens, playgrounds, and overgrown waste areas.

PCT 3-15 ULV can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes within or adjacent to these areas. Application can be made where the following crops are present:

Alfalfa	Corn, grain	Onion, bulb
Almond	Corn, stover	Peach
Apple	Corn, sweet, kernel + cob with husks removed	Pepper, bell
Artichoke	Eggplant	Pistachio
Asparagus	Fruit, pome, group 11	Potato
Avocado	Garlic	Soybean, seed
Broccoli	Range grasses	Spinach
Brussels sprouts	Horseradish	Tomato
Cabbage	Leaf petioles subgroup 4B	Vegetable, cucurbit, group 9*
Cauliflower	Leafy greens subgroup 4A	Walnut
Celery	Lettuce, head	Watercress
Cherry	Mushroom	
Corn, forage		

* 40 CFR 180.41 Crop Group 9: Cucurbit Vegetables, includes Crop Subgroup 9A (melon) and Crop Subgroup 9B (squash/cucumber)

In the treatment of corrals, feedlots, swine lots, poultry ranges and zoos cover any exposed drinking water, drinking fountains and animal feed before application..

For best results treat when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze is preferable. Application in calm air conditions is to be avoided. Apply only when wind speed is greater than 1 mph. Air temperature should be greater than 50 °F when conducting all types of applications.

Do not treat a site with more than 0.007 lb. permethrin and 0.035 lb. [piperonyl butoxide][PBO] per acre in a 3-day period. Retreatments within a 3-day period shall not exceed 0.007 total lbs. permethrin or 0.035 total lbs. [piperonyl butoxide][PBO] in any site. Do not exceed 25 applications at maximum labeled rate (0.005 lbs permethrin/0.025 lbs piperonyl butoxide [PBO] per acre) at any site in one year. When targeting *Aedes taeniorhyncus* and other difficult species, applications may be made up to 0.007 lbs permethrin and 0.035 lbs piperonyl butoxide [PBO] (4.0 fl. oz PCT 3-15 ULV) per acre. Do not exceed 0.18 lbs of permethrin or 0.90 lbs piperonyl butoxide [PBO] per acre per site per year. When rotating this product with other insecticides containing [piperonyl butoxide][PBO], do not exceed 2 lbs [piperonyl butoxide][PBO] per acre per site per year. More frequent applications may be made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

SPRAY DROPLET SIZE DETERMINATION

Ground-based Application: Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 30 microns (Dv 0.5 < 30 um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 um). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra.

Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Application made at or below 200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ($D_v 0.5 < 60 \mu m$) and that 90% of the spray is contained in droplets smaller than 100 microns ($D_v 0.9 < 100 \mu m$). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Application made at greater than 200 feet above ground elevation: Spray equipment must be adjusted so that the volume median diameter produced is less than 70 microns ($D_v 0.5 < 70 \mu m$) and that 90% of the spray is contained in droplets smaller than 145 microns ($D_v 0.9 < 145 \mu m$). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

GROUND APPLICATION

Apply PCT 3-15 ULV through standard ULV cold aerosol or non-thermal aerosol (Cold Fog) generators undiluted at a flow rate of 3.1 to 17.4 fluid ounces per minute, and an average vehicle speed of 10 MPH. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.00088 to 0.005 pounds of Permethrin and 0.0044 to 0.0264 pounds of Piperonyl Butoxide [PBO] per acre. An accurate flow meter must be used to ensure the proper flow rates.

Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high.

Permethrin/PBO Pounds per Acre	Application Rates Fl. oz./Min.				Fl. oz. PCT 3-15 ULV per Acre
	5MPH	10MPH	15MPH	20MPH	
0.005/0.025	8.7	17.4	26.1	34.9	2.88
0.0025/0.0125	4.4	8.7	13.1	17.4	1.44
0.00088/0.0044	1.5	3.1	4.6	6.1	0.51

Failure to follow the above directions may result in reduced effectiveness.

AERIAL APPLICATION

PCT 3-15 ULV may be applied undiluted at rates of 0.0025 to 0.005 pounds Permethrin (1.44 to 2.88 fl. oz. PCT 3-15 ULV) per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. Do not apply by fixed wing aircraft at a height less than 100 feet, or by helicopter at a height less than 75 feet unless specifically approved by the state or tribe based on public health needs. Aerial applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs.

IN FLORIDA: Aerial applications of this product require trained personnel to perform industry accepted assays to monitor resistance formation in targeted mosquitoes.

[Storage and Disposal for non-refillable containers]

STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE AND SPILL PROCEDURES: Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent), then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[Storage and Disposal for refillable containers]

STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE AND SPILL PROCEDURES: Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

NOTICE: To the extent provided by law, seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name: PCT 3-15 ULV
Description: Insecticide for control of adult mosquitoes, biting and non-biting midges, and blackflies
EPA Reg. No.: 86291-4

Company Identification:

Precision Control Technology, Inc.
550 Aero Lane
Sanford, FL 32725

Emergency Response Telephone Numbers
For Spills Call: 1-(800)-424-9300
For Medical Emergencies Call: 1-(866)-897-8050

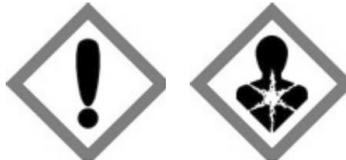
SECTION 2: HAZARD IDENTIFICATION

United States (US)
According to OSHA 29 CFR 1910.1200 HSC (2012)

Classification of the Substance or Mixture

Aspiration Hazard: Category 1
Acute Toxicity (Inhalation): Category 4

Pictogram:



Signal Word: Danger
Hazard Statements: May be fatal if swallowed and enters airways
Harmful if inhaled

Precautionary Statements:

PREVENTION: Avoid breathing mist/spray. Use only outdoors or in a well-ventilated area.
RESPONSE: If swallowed: Immediately call a poison control center or doctor. Do NOT induce vomiting.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a Poison center or doctor if you feel unwell.
STORAGE: Store locked up.
DISPOSAL: Dispose of contents and container in accordance with local/regional/national regulations.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS:</u>	<u>(% w/w)</u>
Permethrin (CAS Reg. No. 52645-53-1) (3-phenoxyphenyl) methyl (+/-) cis, trans-3-(2,2-dichloroethenyl) -2,2-dimethylcyclopropane carboxylate	3.0%
Piperonyl Butoxide (CAS Reg. No. 51-03-6) Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether And 20% related compounds ¹	15.0%
Inert Ingredients ²	82.0%

¹ PBO (butyl carbityl) (6-propylpiperonyl) ether and related compounds.
² Contains petroleum distillate

<u>MATERIAL:</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Active Ingredients: Permethrin Piperonyl Butoxide	Not established Not established	Not established Not established
Inert Ingredient: Petroleum Distillate	5 mg/m ³ (oil mist)	5 mg/m ³ (oil mist)

SECTION 4: FIRST AID MEASURES

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hotline Number: You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.</p>	

Note to Physician: Contains petroleum distillate-vomiting may cause aspiration hazard.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point:	> 230° F (110° C)
Method Used:	TCC
Extinguishing Media:	Foam, CO ₂ , or dry chemical is preferred. Soft stream water fog only if necessary
Fire & Explosion Precautions:	Foam fire-extinguishing system is preferred because uncontrolled water can spread possible contamination. Do not allow fire-fighting water to escape into waterways or sewers. Toxic irritating gases can be formed.
Fire-Fighting Equipment:	Use positive-pressure self-contained breathing apparatus and full protective equipment.
Hazardous Decomposition:	Under fire conditions hydrogen chloride, oxides of chlorine, carbon dioxide, carbon monoxide, and asphyxiants can be formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS: Wear protective clothing as described in Section 8 of this SDS. Absorb liquid with material such as clay, sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal and label the contents. Area can be washed down with a suitable solution of bleach or soda ash and an appropriate alcohol (methanol, ethanol, or isopropanol). Follow this by washing with a strong soap and water solution. Absorb any excess liquid as indicated above, and add to the disposal container. Keep product, contaminated materials and wash water out of streams and sewers. Wash exposed body areas thoroughly after handling.

SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Do not contaminate water, food or feed by storage or disposal. Do not use, pour, spill or store near heat or open flame.

SKIN PROTECTION: While using or handling this product wear long sleeved shirt and long pants, socks, and shoes. Contaminated leather articles, such as shoes, belts, and watchbands, should be removed and destroyed. Launder all work clothing before reuse. Keep work clothing separated from household laundry.

SPECIAL PRECAUTIONS FOR HANDLING AND STORAGE: See product label. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 7: HANDLING AND STORAGE (cont'd)

Store product in its original labeled container in a cool, dry, locked place designated for such insecticides and out of reach of children. In case of spillage, soak up with absorbent material such as sawdust, or fuller's earth; sweep up and place in a labeled container and dispose of as follows.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINE(S):

Permethrin	5 mg/m ³
Piperonyl Butoxide	None established
Petroleum Distillate	5 mg/m ³ (oil mist).

VENTILATION: Use with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Wash hands thoroughly after handling. Wash clothing before re-using.

RESPIRATORY PROTECTION: Not usually required. In instances where exposure limits are exceeded, wear a NIOSH-approved pesticide respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides.

EYE/FACE PROTECTION: Use safety glasses, goggles or a face shield.

HAND PROTECTION: Protective glove selection must be based on the user's assessment of the workplace hazards. Suitable protective chemical resistant materials include barrier laminate, nitrile, neoprene or Viton.

SKIN PROTECTION: Wear suitable protective clothing including long-sleeve shirt, long pants, shoes and socks. Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Very Light Yellow, Gardner 2
Physical State:	Liquid
Odor:	Very Faint Chemical Odor
Density:	0.862 g/cc @ 25° C
Solubility:	Does not disperse in water
Viscosity:	19.87 CPS @ 25° C
pH:	4.05 (1% dispersion)
Stability:	Stable

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 10: STABILITY AND REACTIVITY

Stability:	(CONDITIONS TO AVOID) Avoid heating above 230°F (110° C). Contains a petroleum distillate solvent which can burn.
Incompatibility:	(SPECIFIC MATERIALS TO AVOID) Strong Oxidizers.
Hazardous Decomposition:	Under fire conditions hydrogen chloride, oxides of chlorine, carbon dioxide, carbon monoxide, and asphyxiants can be formed.
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

SKIN ABSORPTION: The acute dermal toxicity is considered to be low. The dermal LD₅₀ for rabbits is greater than 2000 mg/kg.

INGESTION: The acute oral toxicity is considered to be low. The oral LD₅₀ for rats is greater than 1000 mg/kg. Small amounts that might be swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause serious injury, even death. If aspirated (liquid enters the lungs), may cause lung damage or even death due to chemical pneumonia.

INHALATION: The acute inhalation toxicity is considered to be low. The inhalation LC₅₀ for rats is greater than 4 mg/l for 4 hours. Symptoms of excessive exposure includes squinting eyes, irregular and rattled breathing, ataxia, headache, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Excessive exposure may produce effects on the nervous system such as sensitivity to touch and sound, tremors, abnormal movement, and clonic convulsions. Long-term studies with permethrin in laboratory animal resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system, and histopathological changes in the lungs and liver. Long-term studies with piperonyl butoxide indicated increased organ weights in the liver, kidney, and adrenal glands.

CANCER INFORMATION: Chronic feeding studies with permethrin in mice and rats indicate limited evidence of oncogenicity in laboratory animals. Based on comprehensive evaluations of all relevant health effects data, it was concluded that the oncogenic potential in humans is extremely weak or nonexistent. A chronic feeding study in mice indicate an increased incidence of benign liver tumors; the significance of these findings is questionable and under review. The doses that produced this oncogenic effect in laboratory animals, greatly exceeds human exposure levels for the recommended use of this product.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 11: TOXICOLOGICAL INFORMATION (cont'd)

TERATOLOGY (BIRTH DEFECTS): The active ingredients in this product did not cause birth defects in laboratory animal studies. Exposures having no effect on the mothers had no effect on the fetuses in rabbits and rats. The no-effect levels for permethrin in rabbits and rats were 600 mg/kg and 50 mg/kg, respectively. The no-effect levels for piperonyl butoxide in rabbits and rats were 200 mg/kg and 1000 mg/kg, respectively.

REPRODUCTIVE EFFECTS: Permethrin and piperonyl butoxide did not interfere with fertility in animal reproduction studies. The no effect level for permethrin in a two-generation rat reproduction study was 180 mg/kg. The no-effect level for piperonyl butoxide in a two-generation rat reproduction study was 350 mg/kg.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Based on a number of *in vivo* and *in vitro* studies, it was concluded that the active ingredients in this product are not mutagenic.

SECTION 12: ECOLOGICAL INFORMATION

PHYSICAL ENVIRONMENTAL PROPERTIES: In soil, permethrin is stable over a wide range of pH values. Due to its high affinity for organic matter, ($K_{oc} = 86,000$), there is little potential for movement in soil or entry into ground water. Permethrin has a Log P_{OW} of 6.1, but a low potential to bioconcentrate ($BCF = 500$) due to the ease with which it is metabolized. Piperonyl butoxide is reported to have a maximum half-life of 4.3 days in soil and from 0.55 to 1.64 days in aqueous environments. Gravitational settling remove piperonyl butoxide released in the atmosphere as an aerosol. Gaseous piperonyl butoxide degrades in the atmosphere with an estimated half-life of 3.4 hours. It is reported that piperonyl butoxide has a low potential for environmental bioconcentration.

ENVIRONMENTAL TOXICOLOGY: Permethrin is highly toxic to fish ($LC_{50} = 0.5 \mu\text{g/L}$ to 315 $\mu\text{g/L}$) and aquatic invertebrates ($LC_{50} = 0.02 \mu\text{g/L}$ to 7.6 $\mu\text{g/L}$). Marine species are often more sensitive than the freshwater species. Bacteria, algae, mollusks, and amphibians are much more tolerant of permethrin than the fish and arthropods. Care should be taken to avoid contamination of the aquatic environment. Permethrin is slightly toxic to birds and oral LD_{50} values are greater than 3,600 mg/kg. Longer dietary studies showed that concentrations of up to 500 ppm in the diet had no effect on bird reproduction. Piperonyl butoxide is acutely toxic to fish ($LC_{50} = 3.94 \text{ mg/L}$ to 6.12 mg/L) and highly toxic to aquatic invertebrates ($LC_{50} 0.23 \text{ mg/L}$ to 0.51 mg/L). Care should be taken to avoid contamination of aquatic environments. Piperonyl butoxide has a low to very low toxicity to birds with an acute oral LD_{50} greater than 2,250 mg/kg and longer-term dietary studies at LC_{50} values greater than 5,620 ppm.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 13: DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site, or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling is not available then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows:

For Containers equal to or less than 5 Gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with mineral oil and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For Containers greater than 5 Gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with mineral oil. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over on its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

For Bulk Containers: (Refillable Container) Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with mineral oil. Agitate vigorously or recirculate mineral oil with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

SECTION 14: TRANSPORTATION INFORMATION

DOT (US)

Not regulated (Bulk and Non-Bulk Quantities)

IMDG (Vessel)

UN Number: 3082
Hazard Class: 9
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (PERMETHRIN)
Marine Pollutant: Yes

ICAO/IATA (Air transport)

UN Number: 3082
Hazard Class: 9
Packing Group: III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (PERMETHRIN)
Environmental Hazard: Yes

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 15: REGULATORY INFORMATION

FIFRA INFORMATION:

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

Signal Word: CAUTION

PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are: barrier laminate, nitrile rubber, neoprene rubber, or Viton.

Mixers, loaders, applicators, and other handlers must wear: long-sleeve shirt and long pants, shoes plus socks.

In addition, all handlers except for applicators using motorized ground equipment, pilots and flaggers, must wear chemical-resistant gloves. In addition, mixers/loaders, persons cleaning equipment, and other persons exposed to the concentrate must wear a chemical-resistant apron. See engineering controls for additional requirements.

User Safety Requirements: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Engineering Controls: Pilots must use an enclosed cockpit that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 15: REGULATORY INFORMATION (cont'd)

OTHER FEDERAL REGULATIONS:

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Permethrin	52645-53-1	4.6%
Piperonyl Butoxide	51-03-6	4.6%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- An immediate health hazard
- A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Category	Rating
Health	1
Flammability	1
Reactivity	0

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY

ACT (CERCLA, or SUPERFUND): This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

Category:

Chemical Name	CAS Number	RQ	% in Product
Permethrin	52645-53-1	not listed	3.0%
Piperonyl Butoxide	51-03-6	not listed	15.0%
Petroleum Distillate	64741-89-5	not listed	82.0%

Precision Control Technology, Inc.

PCT 3-15 ULV

SAFETY DATA SHEET

SECTION 15: REGULATORY INFORMATION (cont'd)

U.S. California Proposition 65: Not listed

STATE RIGHT-TO-KNOW : National, state, provincial or local emergency planning, community right-to-know or other laws, regulations or ordinances may be applicable--consult applicable national, state, provincial or local laws.

SECTION 16: OTHER INFORMATION

SDS Date: November 18, 2016

This document is prepared pursuant to the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012. In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws and regulations. See SDS for health and safety information.



June 1, 2020

To Whom It May Concern:

This letter is to certify that Precision Control Technology, Inc. (PCT) is the sole manufacturer of the following products:

- Aqua Pursuit
- Pursuit 30-30 ULV
- Pursuit 31-67 ULV
- Pursuit 4-4 ULV
- PCT 3-15 ULV
- PermaSeaseUC 20-20
- PermaSeaseUC (30-30)

ADAPCO, LLC is our exclusive and sole source distributor for these products in the United States. If you have any questions, please do not hesitate to contact me at (800) 367-0659.

Regards,

Jason Trumbetta
General Manager

111 South Calvert Street, Suite 1800 • Baltimore, MD 21202
Telephone (800) 920 1001

From: [Morales, Cynthia](#)
To: [Moss, Mary](#)
Subject: RE: Assignment of Requisition No. HWB0001551, Open-End Contract for Mosquito Control Products - Solicitation No. BLD2121227B1
Date: Wednesday, July 8, 2020 8:44:17 AM

Good Morning Mary,

See below response to the RFI. Let me know If you have any questions.

Vendor	Product being offered based on the response from vendor in the Bid Tabulation from RFI No. BLD212122F1?	Can the vendor provide the product requested in the RFI No. BLD212122F1? (Yes or No)	If the vendor cannot provide the product requested from RFI No. BLD212122F1 , can we use the product being offered from vendor's response? If not, why?	Additional Information
Target Specialty Products	Duplex®	Yes		
Dayrel Cleaning Service, Inc.	Cleaning Services	No	No, this company provides cleaning services not mosquito control products.	
Adapco, LLC	PCT 3-15, which is an equivalent to Biomist 3-15	No	We solicited for Biomist 3+15, which has been used as an adulticide for several years by Highway and Bridge Maintenance division- mosquito Control. Currently, our spray equipment are calibrated for Biomist 3+15. If we	

			<p>changed from Biomist 3+15 to the PCT 3+15, it will require recalibration of our spray equipment as well as removal of any existing product from our storage tanks. The removal of this product, will require the hiring a licensed company to clean, remove any residual chemical and cleaning agent as well as proper disposal, as required by the EPA and the chemical label. An acquisition of a such company, will require additional cost to our agency.</p>	
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Cynthia M. Morales, Office Manager
Public Works Department
Highway & Bridge Maintenance Division

Mosquito Control section
1201 W. Airport Road
Pembroke Pines, fl 33023
Phone: (954) 765-1540
cmorales@broward.org

From: Moss, Mary <MMOSS@broward.org>
Sent: Monday, June 29, 2020 2:00 PM
To: Morales, Cynthia <CMORALES@broward.org>
Subject: RE: Assignment of Requisition No. HWB0001551, Open-End Contract for Mosquito Control Products - Solicitation No. BLD2121227B1

Cynthia,

Yes, it appears they don't offer mosquito control products, but I still had to add them on the chart for full disclosure. I recommend emailing them to confirm.

Best Regards,



Mary Moss, MBA
Purchasing Agent
Broward County Purchasing Division
115 South Andrews Avenue, Suite A460
Fort Lauderdale, FL 33301
Office: 954-357-6078
Cell: 954-854-1538
Fax: (954) 357-6180
www.broward.org/purchasing

From: Morales, Cynthia <CMORALES@broward.org>
Sent: Monday, June 29, 2020 12:58 PM
To: Moss, Mary <MMOSS@broward.org>
Subject: RE: Assignment of Requisition No. HWB0001551, Open-End Contract for Mosquito Control Products - Solicitation No. BLD2121227B1

Mary-
What is the Dayrel cleaning service? That is not MC, am I right?



Cynthia M. Morales, Office Manager
Public Works Department
Highway & Bridge Maintenance Division
Mosquito Control section
1201 W. Airport Road
Pembroke Pines, fl 33023
Phone: (954) 765-1540
cmorales@broward.org

From: Moss, Mary <MMOSS@broward.org>
Sent: Monday, June 29, 2020 12:33 PM
To: Morales, Cynthia <CMORALES@broward.org>
Cc: Byers, Angela <ABYERS@broward.org>; Byrd, Carla <CBYRD@broward.org>
Subject: RE: Assignment of Requisition No. HWB0001551, Open-End Contract for Mosquito Control Products - Solicitation No. BLD2121227B1

Good Afternoon Cynthia,

Please review the Bid Tabulation Packet for Solicitation No. BLD2121227F1, Request for Information (RFI): Mosquito Control Supplies.

Respond to the Request for Information: Mosquito Control Supplies by completing the chart below by end of business July 1, 2020:

Vendor	Product being offered based on the response from vendor in the Bid Tabulation from RFI No. BLD212122F1?	Can the vendor provide the product requested in the RFI No. BLD212122F1? (Yes or No)	If the vendor cannot provide the product requested from RFI No. BLD212122F1, can we use the product being offered from vendor's response? If not, why?	Additional Information
Target Specialty Products	Duplex®			
Dayrel Cleaning Service, Inc.	Cleaning Services			
Adapco, LLC	PCT 3-15, which is an equivalent			