

Optica ULV Declaration of Labelling

Label affixed to container:

1. Product Identification

Product name: Optica ULV

Other names: TBD

This product is an Ultra Low Volume (UL) Ready to Use formulation
packaged in:

- (i) 10L Plastic (HDPE resin-blend) bottle
- (ii) 1L PET bottles
- (iii) 208L steel drums

Manufactured for Clarke International LLC by:

- (i) Clarke Mosquito Control Products, Inc.
159 North Garden Avenue
Roselle, Illinois 60172 U.S.A.
Phone: +1 630-894-2000
Email: clarke@clarke.com
Website: www.clarke.com

Distributed by:

Clarke or local distributor

Lot number, and dates are marked on individual packaging units in format example below: -

Lot Number: (10-digit code e.g. 2301000002)

Date: DD/MM/YYYY

Expiry Date: DD/MM/YYYY

Net Contents: 1L, 10L, 208L

Net Weight: 1.08 kg, 10.8kg, 225kg

2. Ingredient Statement

Broflanilide (CAS # 1207727-04-5):	1.00% w/w
Other Ingredients:	99.00% w/w
Total:	100% w/w

Broflanilide is a meta-diamide in IRAC Group 30

3. Safety

Precautions:

- DO NOT eat, drink, or smoke when using this product
- KEEP OUT OF REACH OF CHILDREN
- WASH HANDS after use and before consuming food
- Remove contaminated clothing and wash before reuse.
- DO NOT store in homes

Warnings:

Avoid contact with eyes and skin. Use the proper protective equipment during the preparation and application of the product: goggles, mask, chemical-resistant gloves, overalls and boots. Do not apply against the wind. For indoor application, evacuate people during application and for an additional 15 minutes. Before applying the product, protect food, kitchen appliances, and pets.

First Aid:

Eye Contact:	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.
Skin Contact:	Rinse skin immediately with plenty of water for 15-20 minutes.
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 Inhaled:	Remove person to fresh air and call a physician.

Green color band for WHO Class U product (Unlikely to present acute hazard), signal word- None.

Environmental Protection

This product is highly toxic to bees exposed to direct treatment. Avoid application to blooming harvest at flower or when bees are visiting, except when application is made to prevent or control a threat to public health from mosquito-borne disease.

Optica ULV Declaration of Labelling

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal. Do not store near heat or open flame. Store in a dry and cool place away from food and feed. Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State, or local guidelines.

Container Handling

Non-refillable container. Do not reuse this container for any other purpose.

In Case of Spill

Use personal protective equipment and recover spilled product with an absorbent material, collect wastes into a sealed container and take it to the nearest authorized center of hazardous waste collection.

4. Directions for Use

Optica ULV is a ready to use insecticide for indoor and outdoor use that controls adult *Aedes aegypti* and *Aedes albopictus* mosquito species. It is approved for application as an ultra-low volume (ULV) non-thermal cold aerosol mist for indoor and outdoor urban, residential, institutional, industrial, and recreational areas where adult mosquitoes are a problem.

Optica ULV is a ready-to-use product, normally applied undiluted. For some application sprayers, it may be necessary to dilute to allow appropriate calibration of the sprayer. For best results, use spray equipment that can be calibrated to apply the labeled rates for Optica ULV so that dilution would not be required. Do not mix with any other insecticide, oil, or fuel. It is recommended that Optica ULV not be mixed with any other incompatible diluents, such as oil or fuel, according to the manufacturer's instructions. The spray equipment must be clean and free from any insecticide residue that has been used previously. All parts of the spray system should be flushed and drained with isopropyl alcohol or another compatible flushing agent, including the inside of the spray tank, all in-line filters, all spray lines, pumping system and spray nozzle(s), flush tank, piping, and flush valve. Avoid storing excess product in the equipment.

Outdoor Use

For best results treat when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud close to the ground. Apply only when ground wind speed is greater than 2 km/hour but less than 20 km/hour. Apply Optica ULV through standard ultra-low volume cold aerosol equipment. Apply undiluted at a rate of 55 to 110 mL per hectare. Adjust equipment flow rate according to vehicle speed rate using a swath width of 100 m for calculation. Use a pumping system that allows flow rates to be adjusted and set.

mL Optica ULV per Hectare	Dose – Broflanilide (g/ha)	mL Optica ULV per minute at Vehicle Speed	
		10 KPH	15 KPH
55	0.59	91	137
73.1	0.79	122	183
110	1.18	183	275

Indoor Use

Spray Optica ULV using portable, electric or gas-powered, ULV cold aerosol application equipment at a rate of 5.48 mL to 11.0 mL per 1000 m². This is equivalent to a dose of 0.059 to 0.118 g Broflanilide per 1000 m².

mL Optica ULV per 1000 m ²	Dose Broflanilide (g)
5.48	0.059
11.0	0.118

Droplet Size Determination

For application as an ultra-low volume (ULV) non-thermal cold aerosol spray mist, equipment should be adjusted so that the volume median diameter (VMD) is between 15 and 20 microns and that 90% of the spray is contained in droplets smaller than 50 microns. [Accepted methods for measuring droplet size include but are not limited to, A.I.M.S., hot wire technology, including the DCIII and DCIV, as well as traditional slide wave methods]. For Teflon coated slides use a spread factor of 0.665.

5. Product Claims

- Recommended for use in space spray rotational programs
- Effective against *Aedes aegypti* and *Aedes albopictus* in both indoor and outdoor uses as a cold-fogging application
- Ready-to-Use ULV formulation improving convenience, particularly for outdoor uses
- Completely new ULV/Space Spray Mode of Action to Mosquito Control Industry
- Kills susceptible and pyrethroid-resistant mosquitoes