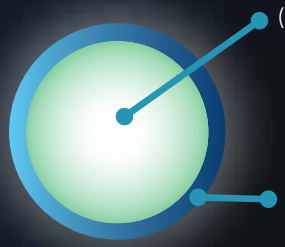
OUR INNOVATIVE DOUBLE-ACTION LARVICIDE

DUPLEX™-G | This cutting edge formulation combines a bio-rational control agent and a biological control agent in a solid form.

(S)-METHOPRENE | Duplex™-G is powered by the original insect growth regulator, (S)-methoprene, which interrupts the normal development of mosquito larvae without impacting non-target mammals, waterfowl, fish or beneficial predatory insects.

***BACILLUS THURINGIENSIS* SUBSPECIES *ISRAELENSIS (Bti)* STRAIN BMP144 |** This biological control agent is a feeding toxin to mosquito larvae without environmental impacts. Both control agents are broken down by the environment over a short time, which prevents the bioaccumulation of active ingredients in the environment.

GRANULAR DESIGN



DUPLEX™-G EFFICACY DATA

SPECIES: *Anopheles quadrimaculatus*

APPLICATION		*Bti* PERCENT CONTROL		
lbs/acre	Water Depth	24 hours	48 hours	72 hours
5	6 inches	96%	100%	100%
7.5	12 inches	99%	100%	100%
15	24 inches	99%	100%	100%

SPECIES: *Anopheles quadrimaculatus*

APPLICATION		(S)-METHOPRENE EMERGENCE INHIBITION			
lbs/acre	Water Depth	7 days	14 days	21 days	28 days
5	6 inches	*Bti*+ 100	100%	100%	89%
7.5	12 inches	*Bti*+ 100	100%	100%	99%
15	24 inches	*Bti*+ 100	100%	100%	88%

SPECIES: *Ochlerotatus taeniorhynchus* or *Aedes taeniorhynchus*

APPLICATION		*Bti* PERCENT CONTROL		
lbs/acre	Water Depth	24 hours	48 hours	72 hours
2.5	4 inches	38%	75%	3%
5	6 inches	76%	100%	82%
7.5	12 inches	94%	100%	97%
7-DAY PRETREATMENT				
10	12 inches	100%	100%	100%

SPECIES: *Ochlerotatus taeniorhynchus* or *Aedes taeniorhynchus*

APPLICATION		(S)-METHOPRENE EMERGENCE INHIBITION			
lbs/acre	Water Depth	7 days	14 days	21 days	28 days
2.5	4 inches	*Bti*+ 100	98%	36%	100%
5	6 inches	*Bti*+ 100	*Bti*+ 100	100%	100%
7.5	12 inches	*Bti*+ 100	*Bti*+ 100	100%	100%
7-DAY PRETREATMENT					
10	12 inches	*Bti*+ 100	*Bti*+ 100	100%	100%

Entomology consultants LLC test data
6 reps per treatment
Used Mulla's formula for *Bti* assessments
(S)-Methoprene assessments used percent emergence inhibition recorded by days after treatment

Learn more at CentralMosquitoControl.com

DOUBLE DOWN WITH DUPLEX™-G

Mosquito Larvicide Evolved

CENTRAL LIFE SCIENCES

KEY DESIGN COMPONENTS

QUICK KILL | Dead larvae within 24-72 hours

LONG RESIDUAL | Larvae control up to 28 days with continuous flooding

CONSISTENT GRANULAR SIZE | Calibration ease and normalized swath characterization for ground and aerial application equipment

HEAVY GRANULE | High bulk density allows for canopy penetration and no-drift applications, for on-target delivery to mosquito breeding habitats

PRE-FLOOD TREATMENTS | Mosquito breeding habitats can be treated before water inundation from planned irrigation, snowmelt and rain fall

ACTIVE INGREDIENTS

- 5.35% *Bacillus thuringiensis subspecies israelensis (Bti)* Strain BMP 144 solids
- 1.6% (S)-Methoprene

KEY DESIGN DEVELOPMENTS

(S)-METHOPRENE CORE

This is designed to increase residual effectiveness by controlling the release of our pioneering IGR, (S)-methoprene, over a 28-day period when continually flooded. In situations where occasional flooding predominates, the (S)-methoprene core stops releasing when the habitat dries and resumes releasing as the habitat re-floods. Control release technology has been optimized along with stability enhancements.

BACILLUS THURINGIENSIS SUBSPECIES *ISRAELENSIS (Bti):*

The outer shell contains layers of *Bti* mixed with a floating agent, a release agent, and an application protectant. The key components of this layer are the floating agent and release agent. The release agent will only deliver *Bti* to the water column when flooded; this ability allows for the pre-treatment of habitats prior to flooding. The release agent is referred to as "Active Booster Release Technology". Water activates the release mechanisms that cause the separation of *Bti* and the floating agent from the (S)-methoprene core. Once the *Bti* and floating agent reach the water surface, the water's surface tension begins to separate the floating agent and *Bti*, causing the *Bti* to be bioavailable to mosquito larvae.

THE DUPLEX ADVANTAGE

FEATURES AND BENEFITS

1. Provides a quick kill with long residual
2. Controls mosquito larvae
3. Helps with resistance management, as the two modes of action in a single product eliminate the need for product rotation
4. Beneficial when (S)-methoprene is the secondary control agent; when larvae development times may be shortened or prolonged by environmental conditions that hamper *Bti* control.
5. Helps with quality control checks, as the quick *Bti* kill allows applications Inspections, without the need to wait for pupation.
6. "Active Booster Release Technology" allows pre-treat with *Bti* without misfires from humidity
7. Offers a 14-day pretreatment ability in dry habitats
8. "Active Booster Release Technology" quickly releases *Bti* into the water column
9. High bulk density allows for excellent foliage penetration
10. Uniform granule size ensures consistent product application through both ground and aerial equipment, including effective swath widths up to 80 feet via drone/UAS
11. Wide application range; 2.5 – 20 lbs. per acre
12. No bioaccumulation of active ingredients
13. *Bti* kills 1st through early 4th instar mosquito larvae within 72 hours
14. (S)-Methoprene disrupts adult mosquito development when applied prior to pupation of mosquito larvae
15. Offers a consistent flow through application equipment (see chart on back cover for details)