### STORAGE AND DISPOSAL

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

### **Pesticide Storage:**

**Reclose containers of unused** DiPel PRO DF. Store in a dry place inaccessible to children and out of sunlight.

### **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. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

### **NOTICE TO USER**

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.



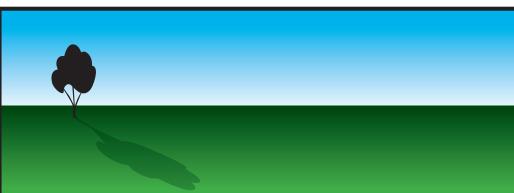
### **ACCEPTED** FOR REGISTRATION April 24, 2023

Doc, ID 586780

New York State Department of Environmental Conservation

# Division of Solid & Hazardous Materials Pesticide Product Registration Division of Solid & Hazardous Materials Pesticide Product Registration





### BIOLOGICAL INSECTICIDE DRY FLOWABLE













For Organic Production

**DiPel PRO DF Biological Insecticide Dry Flowable** is an effective product for control against Lepidoptera pests in agricultural production systems.

Active Ingredient:

Bacillus thuringiensis, subsp. kurstaki, strain ABTS-351, \*Potency: 32.000 Cabbage Looper Units (CLU) per mg of product (14.5 billion CLU per pound of product). The percent active ingredient does not indicate product performance and potency measurements are not federally

### **KEEP OUT OF REACH OF CHILDREN CAUTION**

FIRST AID			
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 by mouth-to-mouth, if possible.     Call a poison control center or doctor for 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 eye.     Call a poison control center or doctor for treatment advice.		
HOTLINE NUMBER			
Have the product container or label with you when calling a poison control			

center or doctor, or going for treatment. You may also contact 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-VALENŤ (682-5368).

### PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Distributed by: Valent U.S.A. LLC P.O. Box 5075 San Ramon CA 94583-5075 www.valent.com Made in U.S.A.

Registered and Manufactured by: Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 U.S.A. 1-800-323-9597

EPA Reg. No. 73049-39 EPA Est. No. 33762-IA-001 List No. 12046-04-04 23-0668/R11

**NET CONTENTS: 1 POUND (454 GRAMS)** 

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Refer to supplemental labeling (package enclosure) for crops, rates, **Personal Protective Equipment** (PPE) and general directions.

### **AGRICULTURAL USE** REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about the standard

DiPel is a registered trademark of Valent BioSciences LLC.



# CAUTION

EPA Reg. No. 73049-39 EPA Est. No. 33762-IA-001

FIRST AID				
lf 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 by mouth-to-mouth, if possible.     Call a poison control center or doctor for 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 eye.     Call a poison control center or doctor for treatment advice.			
HOTLINE NUMBER				

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information For all other information, call 1-800-6-VALENT (682-5368).

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse

#### Personal Protective Equipment (PPE):

- Applicators and other handlers must wear:
- . Long-sleeved shirt and long pants.
- · Waterproof gloves.
- · Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter: OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Controls:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.607 (d-f)), the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

#### **User Safety Recommendations**

- · Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- . Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothina.

#### ENVIRONMENTAL HAZARDS

For terrestrial uses, except when applying aerially over the forest canopy: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

This product must not be applied aerially within 1/4 mile of any habitats of endangered or threatened Lepidoptera. No manual application can be made within 300 feet of any threatened or endangered Lepidoptera

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restrictive entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Pro-

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) 4 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is:

- Coveralls.
- · Waterproof gloves · Shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of the treated areas until snrays have dried

See Chemigation section for chemigation use directions

Days to Harvest: There are no restrictions on applying DIPel PRO DF BIOLOGICAL INSECTICIDE DRY FLOWABLE (hereafter referred to as DiPel PRO DF) up to the time of harvest. Individual State regulations may vary and should be consulted for allowable pre-harvest application intervals.

Sites: DiPel PRO DF may be used for any labeled pest on crops grown in fields, greenhouses, shadehouses, nurseries, and forests; on plants in self-contained, closed-system ponds; and on agricultural commodities in storage.

DiPel PRO DF is an insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larvae must eat deposits of DiPel PRO DF to be affected. Always follow these

- . Treat when larvae are young (early instars) before the crop is
- · Larvae must be actively feeding on treated, exposed plant surfaces
- · Thorough spray coverage is needed to provide a uniform deposit of DiPel PRO DF at the site of larval feeding. Use overhead and drop nozzles to obtain good spray coverage on both sides of foliage. Use sufficient spray volume to insure uniform deposition on all plant surfaces.
- . Under heavy pest population pressure, use the higher label rates, shorten the spray interval, and/or raise spray volume to improve spray coverage
- Repeat applications at an interval sufficient to maintain control, usually 3 to 14 days depending on plant growth rate, moth activity, rainfall after treating, and other factors. If attempting to control a pest with a single spray, make the treatment when egg hatch is essentially complete, but before crop damage occurs
- · A spreader sticker which has been approved for use on growing and harvested crops should be added for hard-to-wet crops such as cabbage, or to improve weather-fastness of the spray deposits.
- DiPel PRO DF is a non-restricted use pesticide and does not require a restricted use permit for purchase and use.
- . DiPel PRO DF may be tank mixed with other labeled insecticides to enhance control. Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Before tank mixing DiPel PRO DF with other labeled products, including spreader stickers, check for tank mix compatibility.

After ingesting a lethal dose of DiPel PRO DF, larvae stop feeding within the hour, and will die within several hours to 3 days. Mortality varies with larval size (instar), lepidopteran species, and dose consumed. Following ingestion, larvae become sluggish, discolor, then shrivel, blacken and die. Smaller larvae die

DiPel PRO DF may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide uniform coverage of infested plant parts. The volume of water needed per acre will depend on crop development, relative humidity, spray equipment, and local experience. Usually, selection of moderate to high spray volume will provide the best results in most equipment. For optimal results, use at least 20 gallons of water per acre for ground application. For aerial application use at least 3 gallons of water per acre; except for arid areas where 5 to 10 gallons of water per acre must be used. Add water to the mix tank and provide moderate agitation. While agitating, add the required amount of DiPel PRO DF. Continue agitation, and add other spray materials, if any. Add remaining water, if any, and agitate until fully mixed. Maintain the suspension with moderate agitation while loading and spraying. Do not mix more DiPel PRO DF than can be used within 12 hours.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-andweather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all of these factors when making decisions.

For Smaller Spray Volumes:				
If Rate is	Use This Amou	nt Per Gallon (v		
1/4 lb/acre or 100 gals	1/2 tsp	(0.04 oz)		
1/2 lb/acre or 100 gals	1 tsp	(0.08 oz)		
1 lb/acre or 100 gals	2 tsps	(0.16 oz)		
2 lb/acre or 100 gals	4 tsps	(0.32 oz)		

#### CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adiustments should the need arise. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

#### **Spray Preparation**

First prepare a suspension of DiPel PRO DF in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of DiPel PRO DF, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of DiPel PRO DF into the irrigation water line so as to deliver the desired rate per acre. The suspension of DiPel PRO DF must be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Any questions on calibration should be directed to your State Extension Service Specialists, to equipment manufacturers or other experts.

NOTE: When treatment with DiPel PRO DF has been completed, further field irrigation over the treated area must be avoided for 24 to 48 hours to prevent washing the material off the crop.

#### PRECAUTIONS FOR APPLICATIONS

#### THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in the mix tank during mixing and application to insure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume for a more dilute solution per unit time.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional. normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment, system connections or fittings leak, nozzles do not provide uniform distribution or lines containing the product must be dismantled and drained

Pests controlled by DiPel Common name	Scientific name
Achema Sphinx Moth	Eumorpha achemon
(Hornworm)	
Alfalfa Caterpillar	Colias eurytheme
Almond Moth	Caudra cautella
Amorbia Moth	Amorbia humerosan
Armyworm	Spodoptera spp., e.g
-	fruginerda littorali

me erosana pp., e.g., *exiqua.* frugiperda, littoralis. Pseudaletia unipuncta Platvotilia carduidactyla

Cydia pomonella

Artichoke Plume Moth Azalea Caterpillar Datana maior Bagworm Thyridopteryx ephemeraeformis Ranana Moth Hypercompe scribonia Banana Skipper Erionota thrax Blackheaded Budworm Acleris gloverana Box Tree Moth Cvdalima perspectalis California Oakworm Phryganidia californica Cankerworm Paleacrita merriccata Grapholita packardi Cherry Fruitworm Nymphula stagnata China Mark Moth Citrus Cutworm Xylomyges curialis

Corn Earworm, Cotton Helicoverna zea Bollworm, Tomato Fruitworm Cranberry Fruitworm Acrobasis vaccinii Cross-striped Cabbageworm Evergestis rimosalis

Codling Moth

Cutworm Various Noctuid species, e.g., Agrotis ipsilon Diamondback Moth Plutella xvlostella Douglas Fir Tussock Moth Orgyia pseudotsugata Ello Moth (Hornworm) Erinnyis ello Elm Spanworm Ennomos subsignaria European Corn Borer Ostrinia nubilalis European Grapevine Moth Lobesia botrana European Skipper Thymelicus lineola

(Essex Skipper) Fall Webworm Melissopus latiferreanus Filbert Leafroller Archips rosanus Fruittree Leafroller Archips argyrospilia Pandemis spp. Fruittree Tortrix Paralobesia viteana Grape Berry Moth Grape Leafroller Platynota stultana Grapeleaf Skeletonizer Harrisina americana

(ground only) Green Cloverworm Plathypena scabra Greenstriped Mapleworm Dryocampa rubicunda Gum Moth Ratrachedra comosae Gypsy Moth Lvmantria dispar Helicoverpa zea Headworm

(continued)

Western Tussock Moth

Pests controlled by DiPel PRO DF (continued)				
Common name	Scientific name			
Head Moth	Homoeosoma ellectellum			
Hemlock Looper	Lambdina fiscellaria			
Hornworm	Manduca spp.			
Imported Cabbageworm	Pieris rapae			
Indian Meal Moth	Plodia interpunctella			
lo Moth	Automeris io			
Jack Pine Budworm	Choristoneura pinus			
Light Brown Apple Moth	Epiphyas postvittana			
Looper	Various Noctuidae, e.g.,			
	Trichoplusia ni			
Melonworm	Diaphania hyalinata			
Mimosa Webworm	Homadaula anisocentra			
Obliquebanded Leafroller	Choristoneura rosaceana			
Oleander Moth	Syntomeida epilais			
Omnivorous Leafroller	Playnota stultana			
Omnivorous Looper	Sabulodes aegrotata			
Orangedog	Papilio cresphontes			
Orange Tortrix	Argyrotaenia citrana			
Oriental Fruit Moth	Grapholita molesta			
Peach Twig Borer	Anarsia lineatella			
Pine Butterfly	Neophasia menapia			
Podworm	Helicoverpa zea			
Raisin Moth	Cadra figulilella			
Redbanded Leafroller	Argyrotaenia velutinana			
Redhumped Caterpillar	Schizura concinna			
Rindworm Complex	Various Lepodoptera			
Saddleback Caterpillar	Sibine stimulea			
Saddle Prominent Caterpillar	Heterocampa guttivitta			
Saltmarsh Caterpillar	Estigmene acrea			
Sod Webworm	Crambus spp.			
Southern Cornstalk Borer	Diatraea crambidoides			
Soybean Looper	Pseudoplusia includens			
Spanworm	Ennomos subsignaria			
Spring and Fall Cankerworm	Paleacrita vernata and Alsophila pometaria			
Spruce Budworm	Choristoneura fumiferana			
Sugarcane Borer	Diatraea saccharalis			
Tent Caterpillar	Various Lasiocampidae			
Thecla-Thecla Basilides (Geyr)	Thecla basilides			
Tobacco Budworm	Heliothis virescens			
Tobacco Hornworm	Manduca sexta			
Tobacco Moth	Ephestia elutella			
Tufted Apple Budmoth	Platynota idaeusalis			
Twig Borer	Anarsia lineatella			
Variegated Cutworm	Peridroma saucia			
Variegated Leafroller	Platynota flavedana			
Velvetbean Caterpillar	Anticarsia gemmatalis			
Walnut Caterpillar	Datana integerrima			
Webworm	Hyphantria cunea			

Orgyia vetusta

Field Crops	Application Rate (pounds/acre)
Herbs and spices (Crop group 19) Including: Allspice; angelica; anise; anise, star; annatto (seed); balm (lemon balm); basil; borage; burnet; chamomile; caper buds; caraway; caraway, black; cardamom; cassia bark; cassia buds; catnip; celery seed; cher (dried); chive; chive; Chinese; cilantro (leaf); cilantro (seed); cinnamon; clary; clove buds; coriander leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; cumin; curry (leaf); dill (dillveed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise, horehound; hyssop; juniper berry; lavender; lemongrass; lovage (seed); bovage (seed); mace; marigold, marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram); mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood.	
Hemp (field and greenhouse)	0.5-2.0 Use 1-2 lb/acre for control of <i>Spodoptera</i> spp. and <i>Helicoverpa</i> spp.
Flowers, bedding plants and ornamentals	0.5-2.0 For best results, use a ground applicator, minimum of 50 gals total mix per acre, 50-100 psi and 3-7 nozzles per bed.
Mint and peppermint	0.5-2.0 Use 1-2 lb/acre for control of <i>Spodoptera</i> spp.
Turf	0.5-2.0
Crops	Application Rate (pounds/acre)
GREENHOUSE/SHADEHOUSE AND OUTDOOR NURSERY	
Crops in the following groups: Vegetable, leafy, except brassica (Crop group 4), Vegetable, brassica leafy (Crop group 5), Vegetable, brassica leafy (Crop group 5), Vegetable, fruiting (Crop group 8-10), Herbs and spices (Crop group 19)	0.5-2.0 Use higher rates for <i>Heliothis</i> spp.
AQUATIC ORNAMENTALS	
Water lilies, water hyacinths and bog plants	1/4-1/2 tsp/100 sq ft (0.6-1.2 g/100 sq ft)
FOREST TREES AND OTHER TREES	
Forest, shade, sugar maple and other trees (e.g., ornamental trees)	For hydraulic sprayers, mix 0.5-1 lb in 100 gals of water. For mist blowers, mix 0.5-1 lb in 10 gals of water.

FOR USE ON AQUATIC PLANTS IN SELF-CONTAINED, CLOSED-SYSTEM PONDS ONLY. For a 10' x 10' pond (100 sq ft) mix 1/4-1/2 tsp of DiPel PRO DF in 1 qt of water and apply to the plants on the surface. Adjust quantities accordingly based on specific number of plants. Do not apply directly to water. 60-70% of the water surface must be covered with the leaves of water lilies, water hyacinths, or bog plants with floating leaves to make an application.

### STORAGE AND DISPOSAL

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

Pesticide Storage: Reclose containers of unused DiPel PRO DF. Store in a dry place inaccessible to children and out of sunlight.

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, Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

#### NOTICE TO USER

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. To the extent consistent with applicable law. user assumes all risks of use, storage or handling not in accordance with accompanying directions.

#### ©2022

DiPel is a registered trademark of Valent BioSciences LLC.

Inclusion of a suitable spreader sticker

approved for forest insect control is

recommended to improve coverage,

rain fastness and/or resist wash-off.

Distributed by: Valent U.S.A. LLC

P.O. Box 5075 San Ramon, CA 94583 www.valent.com Made in U.S.A.

For more information call: 1-800-6-VALENT (682-5368) (Professional Products)

Registered and Manufactured by: Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 U.S.A. 1-800-323-9597