

Fact Sheet

Aerial Application of Checkmate OLR-F

Formulation: Checkmate OLR-F is a formulation of microencapsulated spheres that are colorless. The active ingredients are encapsulated in a biodegradable polyurea.

Particle Size: Average particle size (sphere) of Checkmate OLR-F is 1000 microns which is equal to 1 millimeter and is classified as a droplet comparable to medium to heavy rain. During application this may appear as a small particle of crystal as it falls. Some spheres may adhere to each other and appear as a slightly larger particle.

Application Rate: The application rate is approximately 22 micro liters per square foot. This equates to approximately 28 of these small spheres per square foot. The microencapsulated spheres are mixed with water as a dispersal aid during the application process. Very little application water or moisture is expected to reach the ground from the application.

Settling Velocity: The settling velocity (fall rate) of a 1000 micron particle is 5,775 feet per minute in still air. With an application height of between 500 and 800 feet, a particle of 1000 microns will fall to the ground in 5 to 9 seconds depending on application height.

Particle drift: A 1000 micron particle is not expected to drift significantly. Applications are expected to take place within acceptable wind speed conditions of 0 to 10 miles per hour (mph). Applications will not take place when wind speeds exceed 10 mph. Average wind speeds of between 2 to 8 mph are expected. Wind drift is expected to be minimal with a theoretical drift of between 3 (2 mph) to 30 (8 mph) meters depending on wind speed.

Buffer zones: A 100 meter buffer zone has been incorporated into the application procedures to provide a significant measure of safety. This represents a two and a half times margin of safety under the worst case scenario.

Weather: Weather conditions will be monitored closely with special attention placed on wind speed, wind direction, humidity, temperature, and air stability (inversion conditions). All of these variables play an important part in aerial application procedures.

Environmental monitoring: The application of Checkmate OLR-F will be monitored for environmental effects. A series of drift monitoring stations will be established with results collected and analyzed daily.