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Tongara, SL

soluble liquid

diquat 150 g/l

Non-selective contact desiccant for pre-cropping desiccation of sunflower, pea, rape, soybeans, cereal crops, alfalfa.

Advantages:

— Fast drying of crops, thus facilitating cropping;

— Fast and uniform ripening;

— Reduced losses of seeds during cropping;

— Facilitates cropping;

— Reduced moisture content in seeds.

Action

Mode of action

Tongara, SL contains a high concentration of active ingredient – 150 g/L in the form of diquat ion, which is equivalent to 280 g/L of diquat dibromide . The high concentration of diquat ion ensures a high biological effect under any weather conditions.

Diquat is a contact desiccant. Drying of treated crops occurs by disrupting physiological and biochemical processes in the plant, which weakens the water-holding capacity of tissues, destroys tonoplasts, disrupts cell contents, kills cells, and ultimately leads to plant desiccation.

It causes complete desiccation of treated plants.

The active ingredient decomposes quickly within the plant, making the product safe for use on both seed crops and crops intended for food use.

As the preparation is absorbed by plant leaves, diquat molecule reduces to form a stable radical that may be re-oxygenized using molecular oxygen. As an electron joins, oxygen turns into a highly reactive superoxide anion (O_2^-) and hydrogen peroxide (H_2O_2) oxidizing unsaturated fatty acids. The resulting malondialdehyde inactivates the electron transport system, which results in fast destruction of tonoplasts, cell contents (failure of mitochondria, destruction of quantasome membranes in chloroplast), and perish of the entire plant.

Causes complete desiccation of treated plants.

Speed of action

Depending on weather conditions, signs of desiccation become visible in 5 to 10 days after treatment. Signs of preparation action: gradual withering, yellowing, then drying of plant leaves.

Selectivity:

General purpose preparation of eradicating action.

Spectrum of action

Desiccant for drying crops.

Product application features

The interval between treatment and possible atmospheric fallout should be at least 3–4 hours. The optimal air temperature for treatment is between 15 °C and 25 °C. When applied to sunflower crops, it is compatible with urea.

The effectiveness of Tongara, SL as a desiccant is highly dependent on the quality of water used for preparing the working solution. It is recommended to improve water quality with the Lakmus product before preparing the desiccant working solution.

Usage regulations

Crop	Harmful object	Preparation consumption rate, l/ha	Mix consumption rate, l/ha	Method, time and conditions of application.	Wait time (application frequency)
Sunflower	Desiccation	1.5-2.0 1.5-2.0 (A)	200-300 –ground application 50-100 –aerial application	Planting spraying at start of anthode browning	7(1)
Pea (for grain)	Desiccation	1.5-2.0 1.5-2.0 (A)	200-300 –ground application 50-100 –aerial application	Spraying after full biological ripening, 7 to 10 days before cropping	7(1)
Spring and winter rape	Desiccation	1.5-2.0 1.5-2.0 (A)	200-300 –ground application 50-100 –aerial application	Planting spraying as seeds grow brown in medium tier pods	7(1)
Soybeans	Desiccation	1.5-2.0 1.5-2.0 (A)	200-300 –ground application 50-100 –aerial application	Spraying as 50-70% of pods grow brown, 7 to 10 days before cropping	12(1)

Spiked cereals	Desiccation	1.5-2.0 1.5-2.0 (A)	200-300 –ground application 50 – aerial application	Planting spraying as these become ripe, seed moisture content max. 30%	7(1)
Alfalfa (seed plantings)	Desiccation	2.0-3.0 2.0-3.0 (A)	200-300 –ground application 50 – aerial application	Spraying as 85-90% of pods grow brown	7(1)
Fields intended for sowing spring crops (cereals, soybeans, corn, sunflower) cultivated under minimum or zero tillage technologies	Annual dicotyledonous and grass weeds	1.0-2.0 1.0-2.0 (A)	200-300 –ground application 50-100 – aerial application	Spraying of vegetative weeds before sowing or before the emergence of crop sprouts	-(1)

(A) - aerial treatment

Application technique. Mix preparation method

For ground treatment

Prepare the mix immediately before use and apply during the same day.

Fill the sprayer tank to about its half with water, add the required preparation dose and top up with water until full while continuously stirring the mix using hydraulic agitators. The refilling station shall be disinfected after work completion.

For aerial treatment:

Prepare the mix using mechanical aid immediately before application. It is feasible to use fixed refilling stations SZS-10 and mobile units APT Temp and APZh-12. To prepare the mix, fill the tank of the refilling unit with pure water to 1/2, turn the agitator on, add the measured preparation dose and keep on filling the tank with water while stirring it.

In specific cases when there are no dedicated ground-based preparation and refilling facilities, the mix may be prepared directly in the sprayer tank

of the aircraft. First, fill the tank with pure water to 1/2, then add the required preparation dose and water to the required volume.
As the aircraft approaches the area of treatment, turn the hydraulic agitator on to additionally stir the mix (hydraulic agitator working time min. 2 minutes).

Phytotoxicity

General purpose desiccant. No resistant crops exist.

Potential for resistance

No facts of resistance to preparation were revealed.

Phytotoxicity

No resistant crops exist.

General information

Shelf life

5 years

Hazard class

Hazard class 2, high danger

Storage conditions

Keep the preparation in a room dedicated for pesticide storage. Storage temperature range - minus 15 C to plus 30 C.

Packing

10 liter PE container

Registrant

Schelkovo Agrohim , Russia

Manufacturer

Schelkovo Agrohim, Russia