

# Skull Combi 180 EC™



## Active Ingredients:

Fomesafen 55g/l + Quizalofop-p-ethyl 15g/l + Clomazone 110g/l

**Skull Combi 180EC™ is a selective post-emergence herbicide for the control of both annual grasses and broadleaf weeds in soybean**



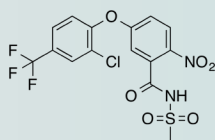
## Characteristics

Skull Combi 180EC™ contains three innovative active ingredients, combining several properties that are important for the control of annual grasses and broadleaf weeds in soybean:

- Broad spectrum of activity
- Systemic herbicide rapidly absorbed by the weeds, leading to fast and effective weed management
- Flexibility in application timing
- Applied as post-emergence application after weed emergence
- Long lasting residual control

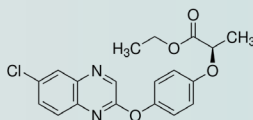
## Chemical information

### Fomesafen



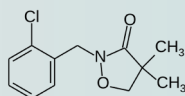
- IUPAC Name: 5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-methylsulfonyl-2-nitrobenzamide
- Chemical formula: C<sub>15</sub>H<sub>10</sub>ClF<sub>3</sub>N<sub>2</sub>O<sub>6</sub>S
- HRAC/WSSA group: 14
- Mode of action: Fomesafen belongs to the diphenyl ether chemical class of herbicides which controls weeds by inhibiting the PPO enzymes in plants. PPO inhibitors interfere with an enzyme involved in chlorophyll biosynthesis of plants.

### Quizalofop-p-ethyl



- IUPAC Name: ethyl (2R)-2-[4-(6-chloroquinoxalin-2-yl)oxyphenoxy]propanoate
- Chemical formula: C<sub>19</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>4</sub>
- HRAC/WSSA group: 1A
- Mode of action: Quizalofop-p-ethyl is in the class of herbicides known as aryloxyphenoxypropionates (FOPs) within the Group 1 herbicides that inhibit the enzyme acetyl-CoA carboxylase (ACCase) in weeds.

### Clomazone



- IUPAC Name: 2-[(2-chlorophenyl)methyl]-4,4-dimethyl-1,2-oxazolidin-3-one
- Chemical formula: C<sub>12</sub>H<sub>14</sub>ClNO<sub>2</sub>
- HRAC/WSSA group: 13, Isoxazolidinone
- Mode of action: Clomazone disrupts the synthesis of both chlorophyll and carotenes which protect chlorophyll from sunlight. This results in chlorosis of the target plants and death due to energy depletion.

## Application Rate

### Important Note:

The indicated crops and recommended rate of application mentioned in this Product informative sheet may not be applicable in the country where the product is intended to be used. User must refer and use the product only as per the officially registration at the country of use and the approved uses and rates by the authorized authorities. The supplier will not be responsible or liable if the product is used on crops which are not listed on the official label as approved the ministry of agriculture at the country of use.

Crop	Rate	Susceptible weeds	Application notes
Soybean	2 - 3 L/Ha	Grasses and Broadleaf weeds	- Do not apply to weeds after the 4-leaf stage • Apply up to the pre-blossom stage of soybean

Indicatively:

**Grasses:** Wild oats (*Avena* sp.), Phalaris (*Phalaris* sp.), Barley grass (*Hordeum* sp.), Foxtail (*Alopecurus myosuroides*), Goose grass (*Eleusine indica*), Panicum sp., Johnson grass (*Sorghum halepense*)

**Broadleaf:** Mayweed (*Matricaria* sp.), Wild radish (*Raphanus* sp.), Pigweed (*Sinapis arvensis*), Chickweed (*Stellaria media*), Pigweed (*Amaranthus* sp.), Goosefoot (*Chenopodium* sp.), Jimson weed (*Datura stramonium*), Bristle grass (*Setaria* sp.)





## Directions for Use

- Skull Combi 180EC™ should be mixed with water to be ready for use. It should be applied with well calibrated professional equipment.
- Ensure full coverage of the weed canopy with the spraying mixture to achieve maximal efficacy.
- Applications should not be made to soybean that is under stress, as this may lead to crop damage particularly when poorer growing conditions follow treatment.
- Always alternate with different mode of action herbicides to achieve maximum efficacy.

### Application Timing



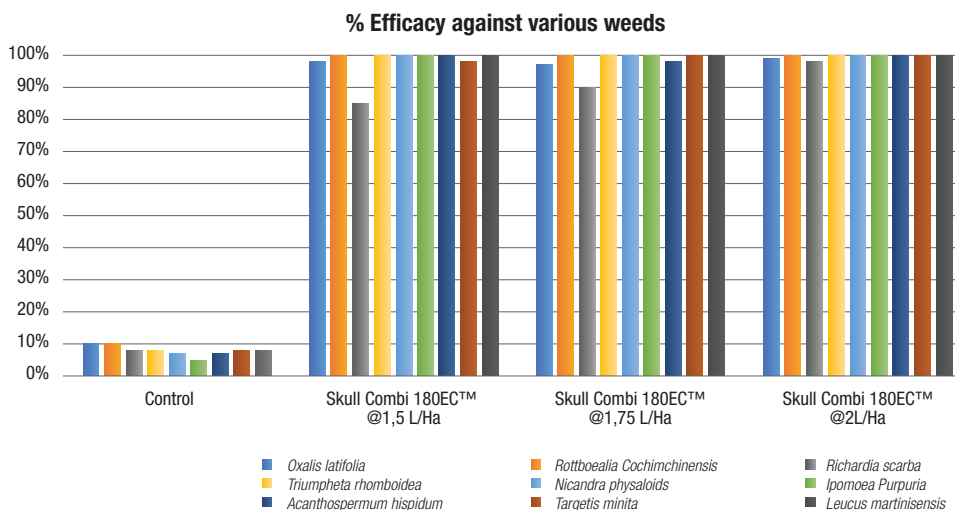
**Phytotoxicity** - It is not possible to evaluate all plant varieties and cultivars and/or local plant species and varieties for tolerance to the active ingredients in the Product. Therefore the user must test for possible phytotoxic response by treating small and limited number of plants/crop at the recommended use rate prior to initiating large scale use. If the plants/crop shows phytotoxic response of any kind, user should consult with the Supplier prior to initiating large scale use.

- Post-emergence application of Skull Combi 180EC might result in temporary scorching of the crop. Plants overgrow it quickly and doesn't have any effect on the final yield.

**Phytotoxicity note:** Post-emergence application of Skull Combi 180EC™ might result in temporary injury in soybean. Trials demonstrated that crop usually overgrow the phytotoxicity. Fomesafen and other Protox (PPO) inhibitors foliar applications might lead to stunted growth, leaf crinkling, speckling of leaves and bronzing. Injury is typically increased with humidity and temperature. Soybeans usually quickly outgrow the injury within 1-2 week, but recovery can be slowed in dry, hot conditions. Avoid application on days with high temperatures and humidity.

## Field Trials

Extensive field trials have proven the efficacy of Skull Combi 180EC™ in different doses against a wide range of weeds in soybean. In Zimbabwe (2023) the following results were obtained:



**Conclusion:** When applied in soybean as a post-emergence herbicide, Skull Combi 180EC™ significantly reduces broadleaf weeds and grasses!

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