EXPRESS® SUPER



Reg. No. L8212 Act No. 36 of 1947

A mixture of water soluble and water dispersible granular herbicides for the control of certain broad leaved weeds in dry land cultivated cereals in the winter and summer rainfall areas.

Reg. Nr. L8212 Wet Nr. 36 van 1947

'n Mengsel van wateroplosbare en waterdispergeerbare korrel onkruiddoders vir die beheer van sekere breëblaaronkruide in droëland verboude kleingrane in die winter- en somerreënvalgebiede.

HERBICIDE GROUP CODE B ONKRUIDDODER GROEP KODE

ACTIVE INGREDIENTS

Chlorsulfuron (sulfonylurea)
Metsulfuron methyl (sulfonylurea)
Tribenuron methyl (sulfonylurea)

...119 g/kg... ...79 g/kg... ...222 g/kg... Chlorsulfuron (sulfonielureum)
Metsulfuronmetiel (sulfonielureum)
Tribenuronmetiel (sulfonielureum)

AKTIEWE BESTANDDELE

Net Mass 250 g & 500 g Netto Massa

REGISTERED BY / GEREGISTREER DEUR:

FMC Chemicals (Pty) Ltd Co. Reg. No.: 1988/001451/07 P O Box / Posbus 44 Postnet Menlyn Waterkloof Glen 0181

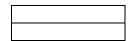
For any emergency or poisoning contact:

Griffon Poison Information Centre

(24 hrs) +27-(0)-82-446-8946

UN No. / VN Nr. 3077

BATCH NUMBER
DATE MANUFACTURED



LOTNOMMER DATUM VERVAARDIG









CAUTION VERSIGTIG





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A mixture of water soluble and water dispersible granular herbicides for the control of certain broad leaved weeds in dry land cultivated cereals in the winter and summer rainfall areas.

ACTIVE INGREDIENTS: Chlorsulfuron (sulfonylurea) 119 g/kg

Metsulfuron methyl (sulfonylurea) 79 g/kg Tribenuron methyl (sulfonylurea) 222 g/kg

Registered by:

FMC Chemicals (Pty) Ltd Co. Reg. No.: 1988/001451/07 P O Box / Posbus 44 Postnet Menlyn Waterkloof Glen 0081

24 Hour Emergency Number: 086 199 9071

WARNINGS:

- The product may irritate eyes, nose, throat and skin.
- Keep out of reach of children, animals and uninformed persons.
- Store in a cool dry place.
- Store away from food and feeds.
- RE-ENTRY: Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas.

EXPRESS® SUPER is a highly active herbicide that in very small quantities, when used incorrectly, can cause serious damage to crop seedlings or deciduous fruit trees and grape vines during the budding and early season growth stages. When aerially applied under the following conditions, it can cause serious damage as far as 3 to 5 km from the nearest flight path of the aircraft: **cloudy weather with relative humidity above 80 % and low air movement of less than 5 km per hour**. Where such conditions prevail, aerial application should not be carried out where crop seedlings or deciduous fruit trees and grape vines in budding or early development stages are present within 5 km of the nearest flight path.

- Should the recommended dosage rate or time of application be exceeded, damage to cereal crops may occur.
- Where certain climatic conditions (such as lengthy wet, cold periods) prevail soon after application, the use of EXPRESS® SUPER can lead to a yellowing of the leaves of the cereal plants and eventually to temporary retarded growth.

Although this remedy has been extensively tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS:

Do not smoke, drink or eat while using this product.

Prevent contamination of food, feeds, drinking water, water supplies and eating utensils.

For safety when mixing:

- Do not inhale dust.
- Wear a face shield.
- In the event of contact with eyes, wash with water immediately.
- · Wear rubber gloves.
- In the event of contact with skin, wash with water and soap immediately.
- In the event of contact with clothes, remove and wash.

For safety when spraying:

- Do not inhale and avoid contact with the spray mist as much as possible.
- Avoid spray drift onto susceptible crops, grazing, rivers, dams and areas not under treatment.

For safety after spraying:

- Change and wash work clothes.
- · Wash yourself.
- Clean applicator thoroughly after use using the following method:
 - Drain tank completely then flush tank, boom and hoses with clean water. Drain again.
 - ii. Fill the tank with clean water and add household ammonia (containing 3 % active) at the rate of 1 ℓ for every 100 ℓ of water. Circulate the ammonia solution through the tank, boom and hoses for at least 15 minutes. Drain completely.
 - iii. To remove traces of ammonia, rinse the tank with clean water and flush through booms and hoses.
 - iv. Repeat step (ii).
 - v. Nozzles and filters must be removed and cleaned separately with ammonia solution at the same concentration as above.
 - vi. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.

Do not spray, drain or flush equipment on or near desirable trees or plants or where their roots may extend.

CONTAINER DISPOSAL:

- Containers and packages must be completely emptied before being disposed of.
- Shake out thoroughly into the application hopper.
- Thereafter rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container before destroying the container in the prescribed manner.
- Destroy empty container by perforation and flattening and never re-use for any other purpose.

RESISTANCE WARNING:

For resistance management, **EXPRESS® SUPER** is a group code B herbicide. Any weed population may contain individuals naturally resistant to **EXPRESS® SUPER** and other group code B herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. **EXPRESS® SUPER** or any other group code B herbicide may not control these resistant weeds.

To delay herbicide resistance:

- □ Avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with registered products from different herbicide group codes.
- □ Integrate other control methods (chemical, cultural, biological) into weed control programmes.

For specific information on resistance management contact the registration holder of this product.

USE RESTRICTIONS:

1. FOLLOW-UP CROPS:

- 1.1 Treated areas should not be planted with any crops other than small grain cereals (wheat, barley, oats) within 10 months of **EXPRESS® SUPER** treatment. Wheat may be planted within 1 month, while barley and oats may be planted 6 months after **EXPRESS® SUPER** application.
- 1.2 **EXPRESS® SUPER** applied to soils with pH levels exceeding 6.5 (KCI) and / or soils containing free lime, may result in longer residual activity with regard to follow-up crops. Consult a FMC technical advisor should any uncertainty occur.
- 2. **EXPRESS® SUPER** has a limited effect on germinating weeds, the control of which is affected by factors such as weed species, soil pH and soil moisture.
- 3. Erratic control/regrowth of weeds may occur if one or more of the following conditions exist:
 - 3.1 Light sandy acid soils that:
 - tend to leach
 - tend to become waterlogged
 - 3.2 Excessive stones covering the soil surface.
 - 3.3 Application made later than 6 weeks after planting in the Western, Southern and Eastern Cape.
 - 3.4 A low plant density.

Under risky conditions described under 3.1 and 3.2, application of the herbicide should take place not later than 2 weeks post-emergence of the weeds.

- 4. **HOELON 36 EC** (Reg. No. L5568 Act No. 36 of 1947) or other diclofop-methyl containing herbicides must not be applied within 10 days of **EXPRESS® SUPER** application.
- 5. Do not spray **EXPRESS® SUPER** onto cereals that are growing under stress conditions (stress conditions can result from water logging, drought, disease, insect damage and mineral element deficiencies, especially nitrogen).
- 6. Undersown Cereals:

EXPRESS® SUPER must not be applied to cereals undersown with legume pastures.

- 7. Dilution water:
 - Use only water of which the quality is suitable for overhead irrigation. Avoid water with a conductivity exceeding 1.0 mS/cm, or with a resistance of less than 300 ohm, or if the pH is higher than 8.
- 8. Do not apply **EXPRESS® SUPER** in combination with insecticides containing chlorpyrifos.
- 9. Rain immediately after application (before the spray deposit has dried) may adversely affect the efficacy of the herbicide.
- 10. Under no circumstances should unused spray mixture be kept overnight.
- 11. Do not apply EXPRESS® SUPER in the summer rainfall area (refer to APPLICATION TABLE B) if a day temperature drop of 5 or more degrees celsius (°C) occured within two days prior to, or is expected, within two days after the application date. Apply EXPRESS® SUPER only after the day temperatures revert back to normal.

DIRECTIONS FOR USE:

USE ONLY AS DIRECTED

- A dosage rate variation of as much as 7,5 % can occur if the **EXPRESS® SUPER** measuring device is used to measure the required dosage rate. For total accuracy, the dosage rates must be weighed out.
- Apply EXPRESS® SUPER with MCPA 400 SL between the 4-6 leaf stage of the crop in the Western, Southern and Eastern Cape (refer to APPLICATION TABLE A).
- Apply **EXPRESS® SUPER** and tank mixtures with MCPA 400 SL or 2,4-D ESTER from the 4 leaf to pre-canopy stage of the crop in the summer rainfall region.
- Adhere to specific directions for use on the MCPA 400 SL or 2,4-D ESTER labels (refer to APPLICATION TABLES A and B).
- Prepare only sufficient spray mixture for immediate use, in the following manner:

MIXING:

- Pre-mix the required amount of EXPRESS® SUPER with a small amount of water to form a smooth cream.
- Half fill the spray tank (or pre-mix tank in case of aerial application) with water.
- Add the creamed EXPRESS® SUPER to the tank through a sieve.

- Thereafter, add the mixing partners e.g. MCPA or 2,4-D ESTER, followed by the adjuvant of choice as per APPLICATION TABLE A or B.
- Top up with water whilst agitating continuously.
- Apply directly after thorough mixing and continue agitation during application.

APPLICATION:

1. Foliar and ground application:

- Apply by means of a tractor mounted boom sprayer that is correctly calibrated to deliver at least 200 ℓ of spray mixture per ha at a constant speed and pressure (100-200 kPa) to ensure an even delivery.
- Avoid overlapping of swaths and close the nozzles while starting, during slow movement, turning and stopping to prevent over-application.

2. Aerial application:

Aerial application of **EXPRESS® SUPER** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- <u>Volume</u>: A spray mixture volume of 30 to 35 \(\ell\) per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 30 to 40 droplets per cm² must be recovered at the target area.
- <u>Droplet size</u>: A droplet spectrum with a VMD of 300 to 350 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable <u>atomising equipment</u> that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible "Relative Span".
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
- reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage)
- damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

COMPATIBILITY:

EXPRESS® SUPER is compatible with **TREND® 90** (Reg. No. L8207 Act No. 36 of 1947), SPECTRA AID S (Reg. No. L7141 Act No. 36 of 1947), BIODEW (Reg. No. L8120 Act No. 36 of 1947), AGRAL 90 (Reg. No. L2987 Act No. 36 of 1947), PARTNER 650 (Reg. No. L5642 Act No. 36 of 1947), MCPA 400 SL (Reg. No. L3616, L5795 & L5793 Act No. 36 of 1947), NuFarm MCPA (Reg. No. L1404 Act No. 36 of 1947), 2,4-D Ester 500 EC (Reg. No. L5794, L3617 & L5792 Act No. 36 of 1947), **PUNCH® C** (Reg. No. L3626 Act No. 36 of 1947), **PUNCH® XTRA** (Reg. No. L4243 Act No. 36 of 1947) and **CAPITAN®** (Reg. No. L4487 Act No. 36 of 1947).

APPLICATION TABLE A:

ONLY FOR THE WESTERN, SOUTHERN AND EASTERN CAPE

CROP	DOSAGE	REMARKS
Ground (foliar) application, and aerial application: Wheat (Triticum aestivum) Barley (Hordeum vulgare)	25 g EXPRESS® SUPER plus 75 ml TREND® 90 per 100 l spray mixture or 300 ml SPECTRA AID S per 100 l spray mixture or 50 ml AGRAL 90 per 100 l spray mixture or 100 ml PARTNER 650 per 100 l spray mixture or 50 ml BIODEW per 100 l spray mixture	Apply as a post-emergence spray when the cereal crop is in the 4 to 6 leaf stage, but after the weeds have emerged and not exceeded the optimum recommended stage as indicated below. Refer to TABLE 1 for weed spectrum controlled with EXPRESS® SUPER. MCPA 400 SL at 500 me/ha should be added to all EXPRESS® SUPER applications when # Raphanus raphanistrum (Wild radish) is present. This also acts as an anti-resistance strategy. Refer to the MCPA 400 SL label for specific USE RESTRICTIONS should this product be added. IMPORTANT: refer USE RESTRICTIONS 3.1 & 3.2, as well as NOTES below.

NOTES:

- Established weeds not killed by pre-plant cultivations and showing signs of regrowth will not be controlled.
- Do not apply if the crop is growing under stress conditions such as drought, excessive moisture etc.
- Moderate chlorosis and/or retarded growth may occur after application. DO NOT exceed the recommended dosage rate.
- Best results are obtained whilst weeds are actively growing under moist conditions during the period of control.
- # Resistance of Raphanus raphanistrum (Wild radish) against sulfonylurea herbicides is a common occurance in the Western, Southern and Eastern Cape. MCPA 400 SL at 500 ml/ha must be added at all times to EXPRESS® SUPER applications when the weed is prevalent.
- For mixing instructions, refer to **DIRECTIONS FOR USE**.

TABLE 1:
WEEDS CONTROLLED IN THE WESTERN, SOUTHERN AND EASTERN CAPE
Also refer to APPLICATION TABLE A

NOTES:

- * Do not apply later than 4 weeks after emergence of weeds and under risky conditions as described under 3.1 and 3.3 of **USE RESTRICTIONS**, not later than two weeks after emergence of the weeds.
- ~ Erratic control of *Fumaria muralis* may occur, but more constant control may be expected if the application is made to young plants (maximum two true leaves).
- ^ Suppression of Foeniculum vulgare (Fennel), Vicia hirsuta (tiny purple vetch) and Vicia sativa (broad leaved purple vetch) can be obtained with a post-emergence application provided the application is made not later than four weeks post-emergence of the weeds. Due to a long germination period, these weeds can germinate after the application and will therefore not be controlled.
- # Resistance of *Raphanus raphanistrum* (Wild Radish) against sulfonylurea herbicides is a common occurance in the Western, Southern and Eastern Cape. MCPA 400 SL at 500 mℓ/ha must be added at all times to EXPRESS® SUPER applications when the weed is prevalent.

<u>APPLICATION TABLE B</u>: ONLY FOR THE SUMMER RAINFALL REGION

CROP	DOSAGE	REMARKS
Ground (foliar) application, and aerial application: ONLY DRYLAND WHEAT (<i>Triticum</i> aestivum)	50 g EXPRESS® SUPER plus 100 m² TREND® 90 per 100 ² spray mixture or 300 m² SPECTRA-AID S per 100 ² spray mixture or 100 m² AGRAL 90 per 100 ² spray mixture or 100 m² PARTNER 650 per 100 ² spray mixture	Apply as a post-emergence spray when the cereal crop is in the 4 leaf to pre-canopy stage and after the weeds have emerged but have not exceeded the maximum recommended stage as indicated below in TABLE 2. The addition of MCPA 400 SL at 500 me/ha or 2,4-D ESTER at 100 me/ha must be added to the EXPRESS® SUPER application for improved control of Fallopia convulvulus, Polygonum aviculare and Senecio consanguineus. The above-mentioned tank mixtures also serve as an anti-resistance strategy. Refer to the MCPA 400 SL or 2,4-D ESTER label for specific USE RESTRICTIONS should these products be added. IMPORTANT: refer USE RESTRICTIONS 3.1, 3.2, 3.3 & 11, as well as NOTES below.

NOTES:

- Do not apply if the crop is growing under stress conditions such as drought, excessive moisture etc.
- Moderate chlorosis and/or shortening of straw length may occur after application but yields will not be adversely affected. DO NOT exceed the recommended dosage rate.
- Best results are obtained whilst weeds are actively growing under moist conditions during the period of control.
- Established weeds not killed by cultivation and showing signs of re-growth will not be controlled.
- For mixing instructions refer to **DIRECTIONS FOR USE**.

TABLE 2:

WEEDS CONTROLLED IN THE SUMMER RAINFALL REGION Also refer to APPLICATION TABLE B

The following weed species are normally controlled if sprayed from seedling up to the stage indicated. Weeds must be actively growing under moist conditions:

BOTANICAL NAME	COMMON NAME	MAXIMUM WEED APPLICATION STAGE
Amaranthus spp.	Pigweed	6 leaf stage
Chenopodium album	White goosefoot	5 cm tall
Helianthus annuus	Volunteer sunflower	6 leaf stage
Raphanus raphanistrum	Wild radish	3-4 leaf stage
Sisymbrium thellungii	Common wild mustard	4 leaf stage
Fallopia convolvulus	Climbing knotweed	5 cm tall
Polygonum aviculare	Prostrate knotweed	5 cm ranks
Spergula arvensis	Corn spurry	5 cm tall
Senecio consanguineus	Ragwort	4 leaf stage
Tribulus terretris	Devil's thorn	10 cm diameter

NOTES:

- Weeds germinating after the application of EXPRESS® SUPER will not be controlled.
- Established weeds not killed by pre-plant cultivation, or weeds that survived chemical application of broad-spectrum herbicides and showing signs of re-growth, will not be controlled.

ACKNOWLEDGEMENT OF TRADEMARKS:

SPECTRA AID - Spectrum Research Services cc

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PARTNER 650 - Chemimpo SA (Pty) Ltd