

CHIKARA[®] Weed Control

Version and date: Version 1 – Winter 2008

Changes since last version: New product

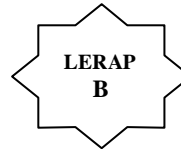
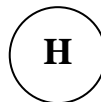


This label is compliant with the CPA Voluntary Initiative Guidance.

FORMULATION AND ACTIVE INGREDIENT: A water dispersible granule formulation containing 25% w/w flazasulfuron for use as a non-selective residual herbicide on natural surfaces not intended to bear vegetation, permeable surfaces overlying soil and hard surfaces (railway ballast only).

PACK SIZE: 50g

MAPP No. 14189




Protect from frost. Shake well before use.

IMPORTANT INFORMATION		
For use only as an industrial herbicide		
Crop / Situation	Maximum Individual dose (g product ha)	Maximum number of treatments
Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil and hard surfaces (railway ballast only)	150	One per year

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

	CHIKARA[®] Weed Control	Water dispersible granule containing 25% w/w flazasulfuron.
	N-DANGEROUS FOR THE ENVIRONMENT	<p>R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>S35 – This material and its container must be disposed of in a safe way.</p> <p>S57 – Use appropriate containment to avoid environmental contamination.</p> <p>To avoid risk to man and the environment, comply with the instructions for use.</p>

SAFETY PRECAUTIONS

Operator Protection

- Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:
- WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate and handling contaminated surfaces.
- WEAR SUITABLE PROTECTIVE CLOTHING (impermeable coveralls), SUITABLE PROTECTIVE GLOVES and RUBBER BOOTS when using handheld equipment. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
- WASH ANY CONTAMINATION from skin and eyes immediately.
- WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the inside of gloves.
- WASH CONCENTRATE from skin and eyes immediately.
- WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking and after work.
- WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental Protection

- DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of any static or flowing water body, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of a ditch which is dry at the time of application. Aim spray away from water.
- DO NOT ALLOW SPRAY from hand held sprayers to fall within 1m of the top of the bank of any static or flowing water body. Aim spray away from water.
- DO NOT ALLOW DIRECT SPRAY from train sprayers to fall within 5m of the top of the bank of any static or flowing water body. Do not allow direct overspray of static or flowing surface waters.
- DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.
- Use appropriate containment to avoid environmental contamination.

Storage and Disposal

- KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
- EMPTY CONTAINER COMPLETELY and dispose of safely.
- KEEP OUT OF THE REACH OF CHILDREN.
- KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

Specific restrictions

- This product must only be used on natural or porous surfaces such as gravel where the user can establish that the underlying surface is soil, and railway ballast surfaces.
- This product must not be applied to any non-porous man made surfaces.

Resistance

CHIKARA Weed Control contains flazasulfuron which is an ALS inhibitor, also classified by the Herbicide Resistance Action Committee as Group B. Use only as part of a resistance management strategy that includes cultural methods of control and does not use ALS inhibitors as the sole chemical method of weed control.

Strains of some annual weeds (e.g. black-grass, wild oats, and Italian ryegrass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures.

Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.

The following measures are part of the resistance management strategy:

- Follow label recommendations.
- Adopt complimentary weed control practices.
- Use good spraying practice to maintain effective weed control.
- Use the correct nozzles to maximise coverage.
- Apply under appropriate weather conditions.
- Monitor performance and report any unexpected results to your product manufacturer.
- Rotational use with herbicides with differing modes of action.
- For post-emergence weed control, CHIKARA Weed Control must be applied in tank mixture with another herbicide with a different mode of action (e.g. glyphosate).
- Only one application of CHIKARA Weed Control may be made per year.

DIRECTIONS FOR USE

Important: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

SITUATION

CHIKARA Weed Control can be used on natural surfaces not intended to bear vegetation, permeable surfaces overlying soil and hard surfaces composed of railway ballast.

SUSCEPTIBILITY OF NON-TARGET SPECIES

Trials have been conducted to evaluate the susceptibility of a large number of trees and shrubs that could be exposed to spray drift particularly during application to parks or close to amenity shrub beds. Trees and shrubs can be grouped in three categories of susceptibility:

1) Tolerant to soil and foliar application

Himalayan Birch (*Betula utilis*).

2) Tolerant to soil application but susceptible to foliar application

For these species, foliage must not be exposed to spray drift, particularly during active growth.

Horse Chestnut (*Aesculus hippocastanum*), Silver Birch (*Betula verrucosa*), Butterfly Bush (*Buddleia davidii*), Common Box (*Buxus sempervirens*), Indian Bean (*Catalpa bignonioides*), Lawson Cypress (*Chamaecyparis lawsoniana*), Common Hazelnut (*Corylus avellana*), Orange Cotoneaster (*Cotoneaster franchetii*), Border Forsythia (*Forsythia intermedia*), London Plane (*Platanus acerifolia*), Lombardy Poplar (*Populus nigra cv.italica*), Cherry Laurel (*Prunus*

laurocerasus), Japanese Rose (*Rosa rugosa*), Northern White Cedar (*Thuja occidentalis*), Western Red Cedar (*Thuja plicata*), Small-leaved Lime (*Tilia cordata*), Weigela (*Weigela styriaca*).

3) Susceptible to both soil and foliar application

Treatment close to these species is not recommended.

Red-barked Dogwood (*Cornus alba*), Japanese privet (*Ligustrum japonicum*), Chinese Privet (*Ligustrum sinense*), Common Privet (*Ligustrum vulgare*), Common Lilac (*Syringa vulgaris*).

Note : When applying CHIKARA Weed Control near plant species not listed in category 1, 2 or 3, it is strongly advised that a small area is sprayed to test for possible phytotoxic effects first, before applying the herbicide on a much larger scale.

TIMING IN RELATION TO CROP AND ENVIRONMENTAL CONDITIONS

CHIKARA Weed Control is active on many weed species. For best results, apply CHIKARA Weed Control before weeds germinate. Where weeds are already actively growing, apply CHIKARA Weed Control in tank mix with a suitable contact herbicide. Avoid post-emergence application to weeds which are senescent, or where growth is impaired by drought, high temperatures, a covering of dust, flooding or frost at, or immediately after application, otherwise poor control may result. It is important that all weeds are at the correct growth stage when treated, otherwise some re-growth may occur and this will need re-treatment.

Do not apply CHIKARA Weed Control in windy conditions or at high pressure which produces a fine spray prone to drifting. DO NOT apply to soils which may later be used to grow crops or plants. Avoid overdosing. Extreme care must be taken to avoid drift onto desirable plants such as crops, trees or ornamentals.

COMPATIBILITY

CHIKARA Weed Control may be tank mixed with the following herbicides for the control of emerged weeds.

1. Roundup Pro Biactive (MAPP 10330)
2. Roundup (MAPP 12645)
3. Glyphos Proactive (MAPP 11976)
4. Glyphos Gold (MAPP 10570)

DOSE RATE, WATER VOLUME AND TIMING OF APPLICATION

Pre-emergence:

Apply 150g product/ha in 200-600 litres of water to control weeds for up to 5 months.

Half fill the spray tank with water and then add the recommended quantity of CHIKARA Weed Control. Agitate thoroughly whilst adding the remaining amount of water to reach the desired total spray solution volume. Do not store the spray solution overnight in the spray tank. Best results will be obtained when CHIKARA Weed Control is applied in late winter or early spring before new weeds have germinated.

There are currently no data available on the effectiveness of CHIKARA Weed Control used pre-emergence on mallows, broad-leaf dock, ragwort, creeping thistle or common nettle.

CHIKARA Weed Control will not control Fat hen, Horsetail, Black nightshade or Common field speedwell, Smooth hawkbeard, Common sowthistle, Ribwort plaintain, Narrow-leaved ragwort and Annual meadow grass.

Post-emergence:

CHIKARA Weed Control has limited post-emergence activity. Therefore, for post-emergence control, CHIKARA Weed Control should be tank mixed with one of the specified tank-mix partners (see Compatibility section).

Apply 150g product/ha in 200-600 litres of water to control weeds for up to 5 months.

Half fill the spray tank with water. Always add the recommended quantity of CHIKARA Weed Control to the water before adding the tank mix partner. Agitate thoroughly whilst adding the remaining amount of water to reach the desired total spray solution volume. Do not store the spray solution overnight in the spray tank. Use the higher water volume where weed populations are dense.

There are currently no data available on the effectiveness of CHIKARA Weed Control when used in tank mixture with glyphosate for post-emergence control of mallows, broad-leaf dock or common couch. There are currently only limited data available on the effectiveness of CHIKARA Weed Control when used in tank mixture with glyphosate for post-emergence control of common nettle.

CHIKARA Weed Control in tank mix with a glyphosate-containing herbicide will give short-term control only (3-4 months) of Creeping thistle, Smooth hawk's beard, Rosebay willowherb, Hairy rocket, Smooth cat's ear, Scentless mayweed, Common ragwort, Common dandelion, Spear thistle and Ribwort plantain.

APPLICATION EQUIPMENT

Apply using a hydraulic sprayer or knapsack sprayer, choosing a nozzle type to obtain the stated water volume and giving a MEDIUM spray quality (BCPC). Use a spray pattern that enables good coverage of larger weeds.

Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Maintain agitation during spraying as well as during mixing. Avoid spray drift on to non-target plants and desired vegetation and areas where plantings are planned as serious damage to these plants may occur.

PROCEDURE FOR CLEANING APPLICATION EQUIPMENT

Application equipment should be cleaned using a dilute ammonia solution as follows:

1. Immediately after spraying, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. Rinse inside of tank with clean water and flush through booms and hoses using at least one-tenth of the spray tank volume. Drain tank completely.
3. Depending on the concentration of the ammonia solution, CHIKARA Weed Control must be diluted sufficiently to get a 0.25% concentration of ammonia in water and start the cleaning procedure as described. (A commercial concentrate at 1% needs to be diluted by adding water, 4 L of water to each 1L of ammonia commercial liquid. A commercial concentrate at 6% needs to be diluted 24 times: 1L concentrate at 6% + 24L water). Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation. Flush the boom, hoses and drain tank again completely. For disposal of washings, follow the Code of Practice for the Safe Use of Pesticides on Farms and Holdings.
4. Nozzles and filters should be removed and cleaned separately with ammonia solution at the same concentration as used in the sprayer.
5. Rinse the tank with clean water and flush through the boom and hoses using at least one-tenth of the spray tank volume. Drain tank completely.
6. For the disposal of washings, follow Code of Practice for the Safe Use of Pesticides on Farms and Holdings. Do not spray onto a sensitive crop or land intended for cropping with sensitive plant species.

NOTE: If it is not possible to drain the tank completely, step 3 must be repeated before going on to step 4.

WARRANTY / DAMAGES

ISK Biosciences Europe S.A. as the Seller, shall be under no liability (except for liability for death or personal injury resulting from the negligence of the seller) whether in contract or in tort for or in respect of any loss or damage resulting from or arising out of the mixing or sequential use, of the goods with any other goods (whether the Seller or any third-party) otherwise than in accordance with the Seller's Recommendations for Use, or resulting from an arising out of the use of the goods in or before abnormal weather conditions or in unusual soil conditions notwithstanding that such conditions may be known or may have been known to the Seller or on plant varieties not known to the Seller to be abnormally susceptible to damage by the goods.

TECHNICAL ENQUIRIES:	01480 403333
24 HOUR EMERGENCY NUMBER:	0032 1458 4545

Always read the label. Use pesticides safely.

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