life scientific
FIRST TO MARKET

CINTAC®

MAPP 18222

H

Contains 30 g/kg mesosulfuron-methyl and 10 g/kg iodosulfuron-methyl-sodium as a water-dispersible granule formulation. Also contains mefenpyr-diethyl. CINTAC is a mixture of two sulfonyl-urea herbicides for control of some grass and broad-leaved weeds species in winter wheat with both contact and limited root activity.

DANGER

Causes serious eye damage.

Very toxic to aquatic life with long lasting effects.

Keep out of reach of children.

Wear protective gloves, protective clothing and eye/face protection.

IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.

If exposed or concerned, please call a POISON CENTRE or a doctor/physician.

Collect spillage.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Repeated exposure may cause skin dryness or cracking.

Contains fatty alcohol ethoxylate alkyl ether. May produce an allergic reaction.

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

To avoid risks to human health and the environment, comply with the instructions for use.

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

055-01CIN3KUKL

IMPORTANT INFORMATION: FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops and situations:	Maximum individual dose (Kg Product/ha)	Maximum total dose (Kg Product/ha)	Maximum number of treatments	Latest time of application
Wheat (winter)	0.5 kg/ha	0.5 kg/ha/crop	One per crop	Flag leaf ligule of the crop just visible (GS 39)

Other specific restrictions: This product must only be applied between 1 February in year of harvest and the specified latest time of application.

READ THE LABEL AND SAFETY PRECAUTIONS BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTANT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE PLANT PROTECTION PRODUCTS (SUSTAINABLE USE) REGULATIONS.

LABEL VERSION V5

Approval Holder and marketing Company:
Life Scientific Limited, Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland. Tel: +353 1 2832024

THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK.

In case of Emergency: Tel. NHS 111

Made in EU

Batch No: SEE PACKAGING

NET Contents: **3 kg**

SAFETY PRECAUTIONS

Operator Protection

Engineering control of operator exposure must be used where reasonably practical in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the product.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying the product.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

Environmental Protection

Do not contaminate water with product or its container. Take extreme care to avoid drift onto crops and non-target plants outside the target area.

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing waterbody, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion in the Local Environment Risk assessment for Pesticides Scheme (LERAPS). Before each application from a horizontal boom sprayer, either a LERAP must be carried out in accordance with the CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years to any person entitled to exercise enforcement powers under or in connection with the Food and Environment Protection Act (as amended). Electronic records will fulfil the requirement for a written record provided that it is available for inspection and that copies can be made.

Storage and Disposal

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

WASH OUT CONTAINER THOROUGHLY and dispose of safely.

PROTECT FROM FROST.

DIRECTIONS FOR USE

IMPORTANT: This information is authorised 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.

CINTAC is an herbicide mixture for control of the listed grass and broad-leaved weed species in all varieties of winter wheat. It contains two ALS-inhibitor herbicides and only one other ALS-inhibiting herbicide can be applied in mixture or sequence with CINTAC to the same crop. Details of permitted mixtures and sequences are given under 'SEQUENCES & TANK MIXTURES' later in this label. It must always by used in mixture with authorised adjuvant Probe (ADJ:0874) or Biopower® (ADJ:0617) at a rate of 1.0 L/ha.

CINTAC is rapidly translocated within susceptible weeds and inhibits growth within hours of application. However, the development of visual symptoms in the treated weeds varies according to species, weather conditions and growth stage at application with some treated weeds taking up to 4 weeks to display clear signs of herbicide activity. The cessation of growth after treatment means that the weeds are no longer competing with the crop for nutrients. Activity is mainly through foliar uptake and good coverage of the target weeds is essential for the best control. Any weeds that emerge after application will not be controlled.

Treatment carries a slight risk of yield losses so application to low populations of weeds is not recommended. The benefits of control of high weed populations will far outweigh any slight effect on the crop.

- Do not apply to crops undersown with grasses, clover, legumes or any other broad-leaved crop.
- Avoid treatment of crops suffering from stress caused by pest or disease attack, drought or water-logging, grazing, nutrient deficiency, compacted soils or any other factor that reduces crop growth.
- Do not apply CINTAC during periods of frosty weather or when rain is likely to fall shortly after application.
- CINTAC is a very active herbicide. Extreme care is required to avoid drift on to other crops, non-target plants, waterways, ponds and ditches.
- Do not overlap spray swaths.
- Store in a frost-free, dry designated agrochemical store.

RESISTANCE MANAGEMENT

CINTAC is classified as having the HRAC mode of action code 'B' indicating that both active ingredients are ALS inhibitors. Weeds which are subject to repeated exposure to the same modes of action such as chickweed, poppy, black-grass, wild oats and Italian rye-grass are at risk of developing resistance to these herbicides. It should be used as part of an anti-resistance strategy which includes cultural methods of control and herbicides utilising different modes of action which are effective against the target weeds. Do not use ALS-inhibitor herbicides as the sole chemical method of grass weed or chickweed control. Use in tank-mixture or sequence with herbicides employing a different mode of action. Strains of some annual grasses (e.g. black-grass, wild-oats and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing resistance should be adopted. Guidelines have been produced

by the Weed Resistance Action Group and copies are available from the AHDB, CPA, your distributor, crop advisor or product manufacturer.

Key aspects of the CINTAC Resistance Management Strategy are:

- ALWAYS follow WRAG guidelines for preventing and managing herbicide resistant grass and broad-leaved weeds.
- IDEALLY adopt an integrated weed control programme incorporating cultural control measures to reduce reliance on CINTAC and the risk of resistance developing (see WRAG guidelines for options).
- DO NOT use CINTAC as a standalone spring treatment for black-grass, rye-grass or common chickweed. Use only in sequence with a robust autumn herbicide programme based on products with non-ALS modes of action. This programme should also be integrated with a programme of cultural control measures.
- IDEALLY apply CINTAC as early as possible in the spring and before stem extension of grass weeds.
- DO NOT use CINTAC as the sole means of grass weed or broad-leaved weed control in successive crops.

MIXING and SPRAYING

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. Half fill the spray tank with clean water. Begin agitation and add the required quantity of CINTAC, together with authorised adjuvant Probe (ADJ:0874) or Biopower® (ADJ: 0617) at a rate of 1 L/ha. Add the remainder of the water and agitate the mixture thoroughly before and during spraying. Do not leave the sprayer standing with the diluted spray in the tank.

Timing: One application of 0.5 kg/ha CINTAC plus authorised adjuvant Probe (ADJ:0874) or Biopower® (ADJ: 0617) at a rate of 1 L/ha should be applied to small, actively-growing weeds from when the wheat has two leaves up until the flag leaf ligule is just visible (GS39). Only one application is permitted and application should be no earlier than 1st February in the year of harvest. Ideally, apply as early as possible after 1st February and before stem extension stage of the target grass weeds.

Application: Apply as a FINE or MEDIUM spray as defined by BCPC in a water volume of 200 – 300 l/ha using flat-fan nozzles and settings that ensure good coverage of the target weeds and penetration of the crop. Use the water volume at the higher end of the range where weed foliage or crop cover is dense. Use application techniques which ensure good weed coverage and crop penetration. DO NOT overlap spray swathes since this may result in crop injury that causes yield reductions.

WEED CONTROL

CINTAC will control the following weeds in winter wheat and is most effective when weeds are small and actively growing. Weeds should be emerged at the time of application and those emerging after application will not be controlled. Monitor efficacy and investigate patches of poor control of grass or broad-leaved weeds. In the absence of an obvious reason for poor activity, consider resistance testing on the seed from surviving weeds.

The higher dose of 0.5 Kg/ha should only be used where brome grasses are the major component of the weed spectrum. For situations where black-grass occurs with some brome present, use the 0.4 Kg/ha dose rate.

Weed species	Post-emergence Activity	
	At 0.4 Kg/ha	At 0.5 Kg/ha
Annual meadow-grass	S up to GS 31	-
Black-grass (sensitive)	S up to GS 39	-
Black-grass (EMR Resistant)*	S up to GS 29	-
Charlock	S up to GS 16 (6 expanded true leaves)	-
Common chickweed	S up to branching (10 cm)	-
Great brome	MR up to GS33	MS up to GS 33
Italian Rye-grass	S up to GS 32	-
Mayweeds	S up to branching (10 cm)	-
Perennial rye-grass (from seed)	S up to GS 32	-
Rough-stalked meadow-grass	S up to GS 31	-
Rye brome	MR up to GS30	MS up to GS 30
Sterile brome	MR up to GS33	MS up to GS 33
Volunteer oilseed rape	S up to GS 16 (6 expanded true leaves)	-
Wild oats	S up to GS 39	-

* CINTAC will control black-grass that has Enhanced Metabolic Resistance up to RR or RRR levels as shown by a resistance test but will not control strains with Target-Site resistance to ALS herbicides.

S = Susceptible; MS = Moderately Susceptible; MR = Moderately Resistant

Note: ALS-resistant chickweed is now present in the UK. To reduce the selection pressure for resistance, do not apply amidosulfuron + iodosulfuron-methyl-sodium in sequence with CINTAC to control chickweed.

SEQUENCES and TANK-MIXTURES

CINTAC must only be applied in sequence or tank-mixture with one other ALS-inhibiting herbicide provided that all label recommendations on both components of the herbicide programme are complied with.

ALS-inhibiting products which are known to be safe include:

Active	Product
amidosulfuron	Eagle
amidosulfuron + iodosulfuron-methyl-sodium	Chekker*
	Sekator OD**
clopyralid + florasulam + fluroxypyr	Dakota
	Galaxy
florasulam	Barton WG
	Boxer
florasulam + fluroxypyr	Hunter
	Slalom
	Spitfire
	Starane XL
metsulfuron-methyl	Alias SX
	Cleancrop
	Mondial
	Simba SX
metsulfuron-methyl + tribenuron-methyl	Ally Max SX
	Biplay SX
	Traton SX
metsulfuron-methyl + thifensulfuron-methyl	Avro SX
	Chimera SX
	Concert SX
	Finish SX
	Harmony M SX
	Presite SX
	Refine Max SX
	Mozaic SX
thifensulfuron-methyl + tribenuron-methyl	Calibre SX
	Inka SX
	Ratio SX

* CINTAC at 0.4 kg/ha may be mixed with up to 180 g/ha Chekker.
** CINTAC at 0.4 kg/ha may be mixed with up to 200 g/ha Sekator OD.

CINTAC may also be applied in sequence with only one of the following ALS-inhibiting herbicides. Note that these sequences are only permitted where the flupyrsulfuron product has been applied in tank-mixture with a suitable residual partner such as pendimethalin and/or flufenacet-based products prior to black-grass emergence to reduce the risk of the development of resistance in black-grass.

Active	Product
diflufenican + flupyrsulfuron-methyl	Absolute
flupyrsulfuron-methyl	Bullion
	Ductis SX
	Exceed SX
	Lexus SX
	Staka SX

To combat the risk of the development of resistance, these mixtures and sequences should only be used in conjunction with an effective autumn-applied non-ALS herbicide programme. Do not tank-mix or sequence CINTAC with other ALS-inhibitors, including sulfonylureas, unless specifically permitted according to the label instructions.

CLEANING OF APPLICATION EQUIPMENT

To avoid damage to crops other than wheat, the application equipment must be thoroughly de-contaminated after application. Immediately after application, clean all application equipment with a proprietary sprayer cleaner (e.g. All Clear Extra) according to the product instructions. Take care to not mix chlorinating and ammonia based products since it may result in the release of toxic gases.

Dispose of the washings safely. DO NOT spray onto a sensitive crop or land intended to be cropped with a sensitive crop. For disposal of washings in the UK, follow the 'Plant Protection Products (Sustainable Use) Regulations' from the Health and Safety Executive' while in Ireland you should comply with local and national regulations.

FOLLOWING CROPS after normal harvest or crop failure

After normal harvest of a winter wheat crop treated with 0.5 Kg/ha CINTAC winter wheat or winter barley may be sown in the same year as application and spring barley, spring wheat or sugar beet may be sown the following spring. Winter oilseed rape can also be sown in the same year after ploughing but only where just 0.4 Kg/ha has been applied to a winter wheat crop.

In the event of crop failure, only plant winter or spring wheat in the same season as an application of CINTAC and if it has been used in tank-mixture or sequence with one of the permitted ALS-inhibitors, check the partner label and use the most restrictive recommendation for succeeding crops.

CONDITIONS OF SUPPLY

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or after application, which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded, and no responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.