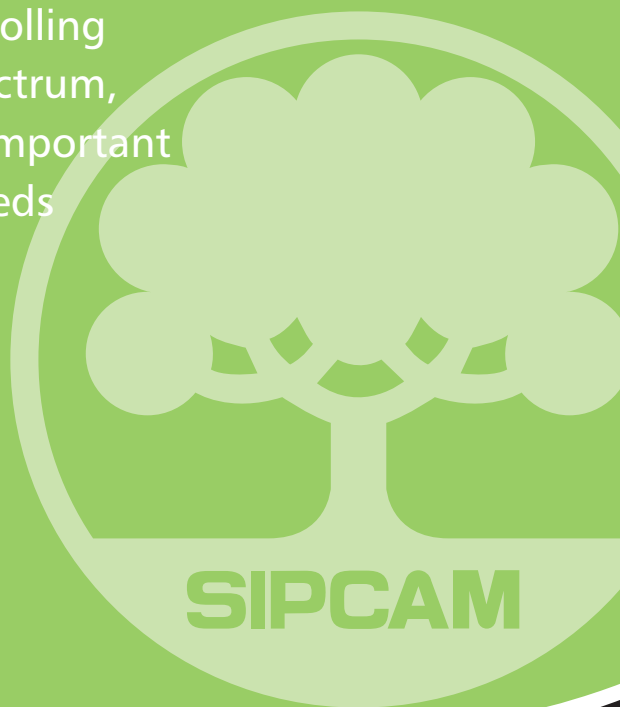


# Volcan Combi

(MAPP 10256)

A herbicide for use in  
sugar beet, controlling  
a wide weed spectrum,  
including many important  
broad-leaved weeds



**SIPCAM U.K.**



# Volcan Combi

(MAPP 10256)

A suspension concentrate formulation containing 300g/l Chloridazon (25.1% w/w) and 280g/l Metamitron (23.4% w/w).

A herbicide for use in sugar beet, controlling a wide weed spectrum, including many important broad-leaved weeds.

**This leaflet is part of the approved product label.**

	<b>HARMFUL</b> Harmful if swallowed.		<b>DANGEROUS FOR THE ENVIRONMENT</b> Very Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. Contains Chloridazon. May produce an allergic reaction.
<p>Safety Data Sheet available for the professional user on request. To avoid risks to man and the environment, comply with the instructions for use.</p>			

## COMPLIANCE WITH THE FOLLOWING CONDITIONS OF USE AND ALL SAFETY PRECAUTIONS IS A LEGAL REQUIREMENT

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops	Maximum dose	Maximum number of treatments	Latest time of application
Sugar Beet	3l/ha	1 per crop	Pre-crop emergence
Sugar Beet	1.5l/ha	3 per crop	When leaves of crop meet in the row

HARMFUL TO FISH OR OTHER AQUATIC LIFE.

Do not contaminate surface waters or ditches with chemical or used container.

### Other specific restrictions:

A maximum total dose of 2.6 kg chloridazon/hectare may only be applied every third year on the same field.

**READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE**

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

## READ THE LABEL BEFORE YOU BUY – USE PESTICIDES SAFELY

### CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but as we cannot exercise control over their mixing and use, 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 for any damage or injury whatsoever arising from their storage, handling, application or use.

Sipcam UK Limited, 3 The Barn, 27 Kneesworth Street, Royston, Herts SG8 5AB. Tel: 01763 212100. Fax: 01763 212101.

VCombi - 01/10

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## **DIRECTIONS FOR USE**

### **INTRODUCTION**

VOLCAN COMBI has residual action, which controls germinating weeds during or shortly after emergence. VOLCAN COMBI is less dependent on soil moisture than many other residual herbicides, however best results will be obtained from application to a moist seed bed. Adequate soil moisture or irrigation or rainfall soon after application is essential for best results.

Applications should be made to a fine, firm, level seedbed. VOLCAN COMBI is suitable for mineral and organic soils with less than 5% organic matter.

All varieties of sugar beet may be treated with VOLCAN COMBI.

### **PRE-EMERGENCE APPLICATION**

Effective weed control in sugar beet crops is best achieved through a sequential programme of sprays. The use of pre-emergence treatments improves overall weed control within the spray programme and increases the flexibility for timing of post-emergence herbicide treatments.

Application of VOLCAN COMBI pre-emergence of the crop will control early flushes of a range of annual grass and broad leaved weeds pending the onset of a planned post-emergence spray-programme. The reduced number and vigour of weeds following pre-emergence treatment with VOLCAN COMBI will improve the efficacy of the post-emergence programme particularly where post-emergence sprays may be delayed for example by weather.

Apply VOLCAN COMBI at a rate of 3 l/ha on all soil types.

Pre-emergence application should be made as part of a sugar beet spray programme and followed by an appropriate post-emergence spray programme as further flushes of weeds appear.

### **POST-EMERGENCE LOW DOSE PROGRAMME TECHNIQUE**

Overall post-emergence repeat spray technique for use on mineral or organic soils.

### **NUMBER OF SPRAYS**

A programme of low dose sprays at the recommended rate should be applied according to the growth stage of the weeds. (See also under **Timing** below).

### **TIMING**

Use a full programme of low dose sprays of VOLCAN COMBI plus phenmedipham as follows:

The first application of the VOLCAN COMBI plus phenmedipham post-emergence programme should be made when the first emerging weeds are at the early cotyledon stage, irrespective of the growth stage of the beet providing that the crop is not suffering from any stress factors.

On organic soils, where weed populations are higher than on mineral soils and emergence is usually very rapid, it is particularly important that the first application is timed so that the weeds are not beyond the very early cotyledon stage.

Subsequent applications of VOLCAN COMBI plus phenmedipham at the recommended rate should be made when new flushes of weeds are at the early cotyledon stage - this is likely to be at 7-10 day intervals, but under conditions favouring rapid weed germination it could be less. Fields should be monitored every few days to check the development of weed populations.

The programme of sprays should continue until weed emergence ceases.

If weeds are still surviving after the previous spray, a further application should be made after 7-10 days, even if no new weeds have emerged.

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## WEED CONTROL

Weeds susceptible at early cotyledon stage\* from a series of well timed sprays of VOLCAN COMBI plus phenmedipham:

### Susceptible weeds\*

Annual Meadow grass	Hemp-nettle, Common	Penny-cress, Field
Black-bindweed	Knotgrass	Persicaria, Pale
Buttercup, Creeping	Marigold, Corn	Pineappleweed
Charlock	Mayweeds	Poppy, Common
Chickweed, Common	Mignonette, Wild	Redshank
Dead-nettle, Red	Nettle, Small	Shepherd's-purse
Fat-hen	Orache, Common	Sow-thistle, Smooth
Flixweed	Pansy, Field	Speedwells
Forget-me-not, Field	Parsley, Fool's	Spurrey, Corn
Fumitory, Common	Parsley-piert	Tarweed
Groundsel		

## RATE OF USE

An overall programme of sprays using:

VOLCAN COMBI 1.5 l/ha + 2.3 l/ha Betosip 114.

NB- the residual activity of VOLCAN COMBI is dependent on the cumulative rate of VOLCAN COMBI applied; therefore, if the full programme of post-emergence sprays is not used, residual activity and efficacy will be reduced.

## VOLUME

Apply VOLCAN COMBI overall in 80 - 100 litres water per hectare using a FINE spray (BCPC classification).

## MIXING

Clean the sprayer, spray bars and nozzles to ensure that there are no traces of the previous products. This is most important after hormone and sulfonyl urea weedkillers. Check that nozzle tips are clean, undamaged, of the required type to give the correct spray quality spray, and are all of the same size, giving equal outputs and distribution. Add a small quantity of clean water to the tank, just sufficient to cover the inlet to the pump. Check that agitation is operating correctly. Add the necessary quantity of VOLCAN COMBI to the water in the sprayer, whilst the agitator is operating. Mix only sufficient chemical for immediate use. Add water to the required level. Continue agitation until the tank load is used.

When tank mixing with BETOSIP 114, one third fill the sprayer with clean water, start agitation then add the VOLCAN COMBI and allow it to thoroughly disperse. Add the BETOSIP 114 and fill to the mark. Use immediately. Continuous and effective agitation is essential, even during stoppages, until the tank is empty.

Ensure that the spray nozzles are set at the correct height to give even spray cover. Commence spraying, being careful to maintain correct pressure and tractor speed. Avoid overdosing or drift onto neighbouring crops.

After each day's work, drain the sprayer, wash thoroughly with water and liquid detergent and spray out completely. Ensure that all liquid is removed from the sprayer tank, pump and hoses. Remove nozzles, open tank and drain pump to allow free access of air to all parts of the system.

## CONTAINER DISPOSAL

Consult the MAFF/HSE publication "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings" before undertaking disposal.

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## **CROP SAFETY**

When used as recommended VOLCAN COMBI exhibits great safety to beet, combined with dependable weed control. However, the beet plant is very sensitive to herbicide treatments, especially if under stress from other factors, for example; previously applied pesticides and herbicides, soft-growth after prolonged rain, sudden changes in temperature, high light intensity, high radiant temperatures at time of application, prolonged low temperature periods, the use of certain soil insecticides particularly on sandy soils, damage by wind blows, nutrient deficiencies such as manganese, and other stress factors, including insect and fungal attack.

Under these conditions crop tolerance to VOLCAN COMBI may be reduced, particularly when used in conjunction with other herbicides, either as tank mixes or sequentially.

### **Frost**

As with other beet herbicides, crops sprayed pre-emergence with VOLCAN COMBI and subsequently subjected to frost may be checked such that they may not fully recover.

### **Succeeding Crops**

Only sugar beet or mangels should be sown within 4 months of the last application of VOLCAN COMBI. Winter cereals may be sown 16 weeks after the last application of VOLCAN COMBI. Mouldboard ploughing to a depth of 15cm followed by thorough cultivation is recommended before planting any crop.

## **PRECAUTIONS**

### **Operator Protection**

AVOID ALL CONTACT WITH SKIN AND EYES.

WASH CONCENTRATE from skin or eyes immediately.

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

Wear suitable protective clothing.

If swallowed, seek medical advice immediately and show this container or label.

### **Environmental Protection**

HARMFUL TO FISH OR OTHER AQUATIC LIFE. Do not contaminate ponds, waterways or ditches with chemical or used container.

Use appropriate containment to avoid environmental contamination.

### **Storage & Disposal**

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.

WASH OUT CONTAINER THOROUGHLY empty washings into spray tank and dispose of safely.

This container must not be re-used.

This material and it's container must be disposed of in a safe way.

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# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF SUBSTANCE, PREPARATION AND COMPANY

Product name – Volcan Combi

Use – Herbicide

Formulation type – suspension concentrate

Supplier – Sipcam UK Limited, 3 The Barn, 27 Kneesworth Street, Royston, Herts SG8 5AB

Emergency phone no – Office 01763 212100

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition – Volcan Combi contains chloridazon and metatmitron

Common name – chloridazon      Common name – Metatmitron

CAS/EC no – 1698-60-8      CAS/EC no – 41394-05-2

Hazard Symbol – Xi, N      Hazard Symbol – Xn, N

R phrases – R43, R50/53      R phrases – R22, R50/53

Conc<sup>c</sup> – 300g/l      Conc<sup>c</sup> – 280g/l

## 3. HAZARDS IDENTIFICATION

Critical Hazard to man – Harmful if swallowed.

Contains chloridazon, may produce an allergic reaction.

Critical Hazard to environment – Very Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

General advice – Remove from source of exposure.

Remove all contaminated clothing and wash affected area.

Inhalation – Remove the individual from exposure to this product and keep well ventilated with fresh air. Keep at rest. If necessary and if breathing stops, give artificial respiration. Seek medical attention.

Skin contact – Remove contaminated clothing immediately.

Wash affected area thoroughly with soap and water.

Rinse with more water. Seek medical attention.

Eye contact – Rinse immediately with plenty of water for at least 15 minutes and then seek medical attention.

Ingestion – If swallowed, wash mouth thoroughly, do not induce vomiting, seek medical attention immediately.

Poisoning symptoms – Symptoms may appear some hours after poisoning. Cutaneous lesions and dermatitis of allergy-type.

Bronchial irritation producing bronchospasm, cough and dyspnoea.

Systemic effects only from high doses: gastroenteritis, nausea, diarrhoea,

headache, excitement and in severe cases liver/kidney damage and

depression of central nervous system. If swallowed, the compound is

absorbed and metabolised. Renal and faecal excretion within 72 hours.

Treatment – No Specific antidote. Treat Symptomatically and Supportive.

Consult a Poisons Centre such as;

0171 635 9191 (National Poisons Information Service - London)

(AUTHORISED MEDICAL PRACTITIONERS ONLY)

## 5. FIRE FIGHTING MEASURES

Suitable extinguishing media – Fight fire with CO<sub>2</sub>, dry chemical powder, foam or water spray (in preference to water jet).

Specific hazards – Combustion may generate toxic fumes containing HCN, CO and NO<sub>2</sub>. Under certain fire conditions traces of other toxic

gases cannot be excluded.

Protective equipment – Wear self-contained breathing apparatus (SCBA).

Specific Methods – Cool containers with spray. Contain fire-fighting

water, bunding if necessary with sand, earth, or other inert material.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment – Wear protective coveralls, neoprene gloves, rubber boots and faceshield or goggles, covering as much of the

body as possible (See Section 8).

Environmental protection – DO NOT CONTAMINATE SURFACE WATERS

OR DITCHES with chemical or used container.

Inform local water plc immediately if spillage enters drains and the National Rivers Authority (England and Wales) or River Purification Boards (Scotland), if it enters surface or ground waters.

Clean up Methods – Contain or absorb spillage with sand or earth.

Sweep up carefully and shovel sweepings into marked bags or drums.

Dispose of through a reputable local waste disposal contractor.

## 7. HANDLING AND STORAGE

Handling – Use Personal Protective Clothing as specified in Section 8.

Avoid fumes - work in a well ventilated area.

Storage – KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

Protect from frost. Keep away from heat sources and direct sunlight.

Other

WHEN USING, DO NOT EAT, DRINK OR SMOKE.

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

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank

and dispose of safely.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Standard (OES) – There is no OES for this product.

Engineering measures – Where possible use a cab fitted with a forced air filtration unit with a pesticide filter when spraying.

Personal Protective Equipment

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE

PROTECTIVE GLOVES\* AND FACE PROTECTION (FACESHIELD) when

handling the concentrate. (\*neoprene or nitrile at least 0.6mm thick).

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the

insides of gloves.

Where PPE cannot be cleaned, dispose of as contaminated waste.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

State – Liquid

Density –

Colour – Beige

Odour – Light, characteristic

pH (10% in water) – 3.5 - 4.5

Explosive properties –

Flammability – Non Flammable

Solubility – dispersible in water

## 10. REACTIVITY AND STABILITY

Stability – Stable under normal ambient conditions. Non-flammable and non-corrosive.

Condition to avoid – High temperatures and direct sunlight.

## 11. TOXICOLOGICAL INFORMATION

Acute oral LD<sub>50</sub> (rat) – Chloridazon 3830 mg/kg

– Metatmitron 2950 mg/kg

Acute dermal LD<sub>50</sub> (rat) – Chloridazon >2,000 mg/kg

– Metatmitron >5,000 mg/kg

Acute inhalation LC<sub>50</sub> (4h, rat) – >30.8 mg/l (ai)

Skin Irritation – non irritant

Eye Irritation – non irritant

Sensitisation – Not known to be a sensitizer

## 12. ECOLOGICAL INFORMATION

Ecotoxicity

(ai) Rainbow Trout LC<sub>50</sub> Chloridazon 32-46 mg/l

Metatmitron 326 mg/l (96hr)

(ai) Daphnia magna LC<sub>50</sub> Chloridazon 131 mg/l

Metatmitron 326 mg/l (96hr)

(ai) Bees oral/contact LC<sub>50</sub> Chloridazon not toxic

Metatmitron not toxic

## 13. DISPOSAL

Contact Local Authority (Environmental Health Department) or a reputable waste disposal company for collection and disposal of unwanted product or containers.

For further guidance on the disposal of containers, surplus spray solution, tank washings and concentrate, refer to Part 5 (Disposal of Pesticide Waste) of the MAFF/HSE booklet "Pesticides: Code of Practice for the

Safe Use of Pesticides on Farms and Holdings".

## 14. TRANSPORT

UN Number – Not classified

Packaging Group – Not classified

Marine Pollutant – Not classified

ADR/RID Classification – Not classified

IMDG/IMO Classification – Not classified

Proper shipping name – ENVIRONMENTALLY HAZARDOUS SUBSTANCE.

LIQUID N.O.S (contains chloridazon/metatmitron)

Transport Emergency Information (Road) – Not classified

(PESTICIDES, LOW HAZARD)

## 15. REGULATORY INFORMATION

Hazard Symbol – Xn, Harmful

– N, Dangerous for the environment

Risk Phrases (R) – R22 Harmful if swallowed

– R50-53 Very toxic to aquatic organisms may

cause long term adverse effects in the

aquatic environment.

Safety Phrases – S35 This material and its container must be

disposed of in a safe way

– S36 Wear suitable gloves

– S46 If swallowed, seek medical advice

immediately and show this container

– S57 Use appropriate containment to avoid

environmental contamination

## 16. OTHER INFORMATION

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

Packaging

Container – 5 Litre HDPE

Outer – 4 x 5 Litre in double-wall carton

Approval number – MAPP 10256