

MITRON 700 SC

**A SUSPENSION CONCENTRATE (SC) FORMULATION CONTAINING
700 G/L (58.3 % W/W) METAMITRON**

Selective soil and leaf herbicide for controlling annual weeds in beetroot, sugar beet, fodder beet, mangolds, ornamentals and forest nursery when applied before sowing, before emergence and after emergence.

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MITRON 700 SC

**A suspension concentrate (SC) formulation containing
700 g/l (58.3 % w/w) Metamitron**

SAFETY INFORMATION

HAZARD STATEMENTS

Harmful if swallowed.

Very toxic to aquatic life with long lasting effects.

Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

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

PRECAUTIONARY STATEMENTS:

Wear protective gloves and protective clothing.

IF SWALLOWED: rinse mouth. Call a POISON CENTER or a doctor.

Collect spillage.

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

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).

WARNING



Marketing company:

BelCrop

Belcrop NV
Tiensestraat 300 -
3400 Landen - Belgium
Tel: +32 11 59 83 60
Fax.: +32 11 59 83 61
www.belcrop.be

Emergency 24h number: +32 11 69 79 80

PCS: 06516

Production date / Batch number: see packaging

SHAKE WELL BEFORE USE - KEEP AWAY FROM FROST - See attached booklet for 'Directions of use'.

Authorisation holder: Certiplant NV, Lichtenberglaan 2045, 3800 Sint-Truiden, Belgium, tel +32 11 88 03 92, fax +32 11 70 74 84

Content: **5 L e**

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Mitron 700 SC

This Booklet is part of the approved Product label.

IMPORTANT INFORMATION FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE				
Crop	Max. single dose (L/ha)	Max. number of applications (per crop)	Max. total dose per crop (L/ha)	Latest time of application
Beetroot Beet - Sugar Beet - Fodder Mangolds	5	-	5	8 true leaves (GS18)
Ornamentals - Woody (field) Forest nursery (field)	4	-	4	-

Other specific restrictions : apply no more than 3.5 kg of metal Mitron/ha in any 12 month period.

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.

INTRODUCTION

MITRON 700 SC is a versatile crop safe selective herbicide with contact and residual properties acting by both leaf and root uptake for the control of annual weeds in beetroot, sugar beet, fodder beet, mangolds, ornamentals and forest nursery. MITRON 700 SC is absorbed by the roots of any emerging weeds.

SPRAY VOLUME

Apply MITRON 700 SC in a minimum of 200 L water per hectare and in a maximum of 400 L water per hectare.

CROP SPECIFIC INFORMATION

Mitron 700 SC may be applied either as a pre-emergence application followed by post-emergence applications or as a post-emergence programme.

Beetroot, sugar beet, fodder beet, mangolds

Pre-emergence

Dose rate : 3 – 5 L/ha, 1 application, depending on the expected weed flora and soil type, with the highest dose being used on heavy soils.

Timing : before sowing-pre-emergence (GS 00-09)

Post-emergence

Dose rate : 2 – 5 L/ha, apply fractionally, depending on the expected weed flora and soil type, with the highest dose being used on heavy soils.

Timing: From first leaf visible (pinhead-size): cotyledons horizontally unfolded (GS 10) until 8 leaves unfolded (GS 18)

Weeds controlled:

Annual broadleaf weeds (*Dicotyledoneae* (annual))

Mayweed (*Matricaria chamomilla*)

Black nightshade (*Solanum nigrum*)

Fat-hen (*Chenopodium album*)

Annual meadow-grass (*Poa annua*)

Woody ornamentals and forest nursery (field)

Dose rate: 4 L/ha, 1 application

Timing: at rest phase (GS 00)

Weeds controlled:

Annual broadleaf weeds (*Dicotyledoneae* (annual))

Remark:

The use in ornamental plants was permitted on the basis of tests carried out with the following species: *Prunus avium*, *Picea abies* and *Pinus nigra subsp. nigra*. Phytotoxicity was observed in *Carpinus betulus*.

RESISTANCE

This product contains metamitron, a Group C1 herbicide, based on the mode of action classification system of the Herbicide Resistance Action Committee. Repeated use of herbicides with the same mode of action can increase the risk of strains of weeds developing resistance to these compounds, leading to poor control. In order to minimise the risk, a strategy for preventing and managing such resistance should be adopted.

Growers are advised to apply products containing herbicides with different modes of action in sequence or tank mix where two or more components are active against the target weeds.

Use the recommended rate of MITRON 700 SC and the correct application timing for the hardest to control weed species present in the field.

The above should be used in conjunction with effective cropping rotation and cultivation techniques e.g. stale seedbed, cultivation and use of non-selective herbicide prior to drilling.

Further guidance on weed resistance management is available from the Herbicide Resistance Action Committee (HRAC) and Weed Resistance Action Group (WRAG). Follow WRAG Guidelines.

FOLLOWING CROPS

Beet crops may be sown at any time following the use of MITRON 700 SC.

Providing 16 weeks elapse from the last application of MITRON 700 SC, winter cereals may be sown in the same season.

Any spring crop may be sown in the season following use of MITRON 700 SC.

Mouldboard ploughing to a depth of 15 cm followed by thorough cultivation is recommended before planting any crop.

MIXING AND SPRAYING

Thoroughly shake the pack before use.

Add the required quantity of MITRON 700 SC to the half-filled spray tank with the agitation system in operation and then fill to the required level. Continue agitation at all times during spraying and stoppages until the tank is completely empty. Spray immediately after mixing.

When tank mixes are to be used, each product should be added separately to the tank; the MITRON 700 SC should be dispersed first.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of container safely.

Avoid spray drift.

Do not use finer than 80 mesh filters in spray lines or nozzles.

Clean spray equipment thoroughly after use.

SAFE DISPOSAL

Do not re-use container for any other purpose.

Triple rinse of empty packaging, safe disposal in accordance with local authority rules and regulations.

COMPANY INFORMATION

This section is not part of the product label.

CONDITIONS OF SUPPLY

The manufacturer/seller/registration holder only guarantees that the supplied product complies with the quality standards in force. The manufacturer/seller/registration holder cannot be held liable neither for results nor for any damage due to the storage, transport or application of the product.

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SAFETY DATA SHEET

Mitron 700 SC

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Name of the substance: Mitron 700 SC

Code: PCS 06516

Formulation type: SC (aqueous suspension concentrate)

Concentration: 700 g/L / 58,3% w/w

Active substance: metamitron

IUPAC-name: 4-amino-3-methyl-6-phenyl-1,2,4-triazin-5-one

Identification number: CAS 41394-05-2

RRN:No registration number is available for this substance, in accordance with the provisions of Article 15 of Regulation (EC) No 1907/2006

1.2 Relevant identified uses of the substance or mixture and uses advised against

identified uses: herbicide for professional use

1.3 Details of the supplier of the safety data sheet



Belcrop NV
Tiensestraat 300
3400 Landen
Belgium

Tel.: +32 11 59 83 60

Fax: +32 11 59 83 61

Email: info@belcrop.be

1.4 Emergency telephone number

Please call the local emergency number

Emergency number in Belgium (24h/24, 7d/7): +32 11 69 79 80

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1

H302, H400, H410

For full text Hazard-statements see section 1.6

2.2 Label elements

Label in accordance with Regulation (EC) No 1272/2008

Hazard pictogram



Signal word

Warning

Hazard statement

H302: Harmful if swallowed.

H410: Very toxic to aquatic life with long lasting effects.

EUH 208: Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statement

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P311: IF SWALLOWED: rinse mouth. Call a POISON CENTER or a doctor.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

The active substance does not fulfill the criteria of a persistent, bioaccumulative and toxic (PBT) substance, nor of a very persistent and very bioaccumulative (vPvB) substance, as outlined in Annex XIII of Regulation (EC) No 1907/2006.

Section 3 : Composition/information on ingredients

3.2 Mixtures

Name	Identification number	RRN	% (% by weight)	Classification according to Regulation (EC) No 1272/2008
metamitron	41394-05-2	not available	700 g/L / 58,8% w/w	Acute Tox. 4, Aquatic Acute 1 H302, H400
1,2-benzisothiazool-3(2H)-on	CAS 2634-33-5	not available	< 2% w/w	Acute Tox. 4, Eye Irr. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1 H302, H315, H318, H317, H400
sodium hydroxide	CAS 1310-73-2	01-2119457892-27-XXX	< 1% w/w	Skin Corr. 1A H314

For full text of Hazard-statements see section 16

Section 4: First aid measures

4.1 Description of first aid measures

If INHALED: Fresh air, rest. In case of symptoms, seek medical attention and show the label or packaging.

In case of contact with SKIN: Rinse the skin with plenty of water or take a shower for 15 minutes. Meanwhile, remove contaminated clothing and shoes. In case of symptoms, seek medical attention and show the label or packaging.

In case of contact with EYES: Rinse thoroughly with water for 10 minutes. Rinse AWAY from the non-affected eye. If wearing contact lenses: if easy to remove, first remove the lenses, then rinse. Consult a doctor and show the label or packaging.

After INGESTION: Rinse mouth and give water to drink. Call the Poison Control Center and whether drinking a solution activated charcoal in water is preferred. Call the 112, a hospitalization designated. Show the label or packaging.

4.2 Most important symptoms and effects, both acute and delayed

No data are available in humans, the symptoms listed are derived from animal studies.

Inhalation: No data available.

Ingestion: dyspnea, muscle twitching, convulsions, circulatory insufficiency (rat 2000 mg / kg).

Skin: not irritating, non-sensitizing, no systemic effects were observed.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:

Prehospital: symptomatic treatment.

Contact the local poison center (see section 1.4) for further treatment in the hospital.

Section 5 : Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media: chemical powder, water spray, CO₂

Unsuitable extinguishing media: Water with full jet (polyvalent foam may not be suitable as an extinguishing medium as the product contains an antifoaming agent).

5.2 Special hazards arising from the substance or mixture

The product contains flammable organic substances. In case of a fire, a thick black smoke containing hazardous products of combustion will be generated (see section 10).

Exposure to decomposition products can be harmful to one's health.

5.3 Advice for fire-fighters

Self-contained breathing apparatus and full protective clothing (boots, overall, gloves, eye and face protection). Avoid discharge of extinguish water into sewer or watercourse.

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

See section 8

6.2 Environmental precautions

Prevent the product from entering into soil, sewers, surface or ground water. If necessary, isolate the contaminated area. First remove spillage and accidental leaks (see section 6.3). Then rinse the contaminated area with water. Do not allow residues to enter into sewer and surface water. Dispose contaminated water according to local legislation. Inform the authorities if product pollutes the environment.

6.3 Methods and material for containment and cleaning up

6.3.1 Containment of a spill

If applicable, cover spillage with absorbing material (sand, clay, diatomite, universal binders, absorbing grain).

6.3.2 Clean-up of a spill

Spills shall be contained by means of absorbent material and a shovel. The collected products shall be disposed of in re-usable barrels or barrels for waste removal. As soon as the substance has been removed, thoroughly clean up the floor and any object that has been in contact with the substance in compliance with the environmental prescriptions.

6.3.3 Additional information

No additional information

6.4 Reference to other sections

See section 1 contact information

See section 7 for handling and storage

See section 8 for exposure controls/ personal protection

See section 13 for disposal considerations

Section 7 : Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective measurements

Work under local exhaust/ventilation. Observe normal industrial and hygiene standards. Wear personnel protective clothing. Avoid contact with skin and eyes. Avoid forming of aerosol or dust. Wash hands after use. Do not discharge product into sewer. Keep away from source of ignition.

7.1.2 Advice on general occupational hygiene

When using, do not eat, drink or smoke. Clean used material. Wash hands after each use.

Wash contaminated clothing after use. Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities

Store in closed packaging in a dry, well ventilated area. Store in original packaging. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. See also section 10.

7.3 Specific end use(s)

See section 1.2.

Section 8 : Exposure controls/personal protection

8.1 Control parameters

8.1.1 Occupational exposure limit values

sodiumhydroxide

limit (8h): 2 mg/m³ inhalation aerosol

8.1.2 Information on currently recommended monitoring procedures

Not known

8.2 Exposure controls

8.2.1 Appropriate engineering controls

See section 7 and 8.1.1.

8.2.2 Individual protection measures, such as personal protective equipment

8.2.2.1 Eye / face protection

Wear safety goggles, with side-protection.

8.2.2.2 Skin protection

8.2.2.2.1 Hand protection

Wear chemical protective gloves (EN374).

8.2.2.2.2 other

Wear suitable work clothes. (Coverall with full body protection)

8.2.2.3 Respiratory protection

Use always in a well ventilated area.

Only if applicable:

Gas, vapours: gas filter: semi-facial mask with ABEK filter.

Dust, mist, fumes: dust mask : P2FFP2

8.2.3 Environmental exposure controls

See section 6: Accidental release measures

See section 7: storage and handling

See section 13: Disposal considerations

Section 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Endpoint (unit)
a) Appearance	white liquid
b) Odour	no characteristic odour
c) Odour threshold	no data available
d) pH	4.9-7.0 (1% solution)
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	> 98 °C
h) Evaporation rate	no data available
i) Flammability (solid, gas)	not relevant for liquid formulations
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	1,19 g/ml
n) Solubility(ies)	no data available
o) Partition coefficient: n-octanol/water	log Pow = 0.85-0.96 (metamitron active substance)
p) Auto-ignition temperature	not auto-flammable
q) Decomposition temperature	not relevant
r) Viscosity	12601.6-376.1 mPa.s
s) Explosive properties	no explosive properties
t) Oxidising properties.	no oxidising properties

9.2 Other information

No additional information

Section 10 : Stability and reactivity

10.1 Reactivity

Stable under normal conditions of handling and storage.

10.2 Chemical stability

Stable under normal environmental temperatures (between 0°C and 40°C). See also section 7.2.

10.3 Possibility of hazardous reactions

No specific data known.

10.4 Conditions to avoid

Materials to avoid: aluminium, iron etc. Corrosive in contact with metals.

10.5 Incompatible materials

No specific data known.

10.6 Hazardous decomposition products

Combustion or thermal decomposition produce toxic and irritating vapours. See section 5.2

Section 11 : Toxicological information

11.1 Information on toxicological effects

	endpoint	duration	species	tested on
a) acute toxicity	oral: 300 mg/kg bw < LD50 < 2000 mg/ kg bw	single dose	rat	formulated product
	dermal: LD50 > 2000 mg/kg	24h exposure	rat	formulated product
	inhalation: no data			formulated product
b) skin corrosion/ irritation	not irritant	4h	rabbit	formulated product
c) serious eye damage/irritation	slight irritant (not classified)	9h	rabbit	formulated product
d) respiratory or skin sensitization	not sensitising		guinea pig	formulated product
e) germ cell mutagenicity	no genotoxic potential	-	multiple in vitro and in vivo test systems	active substance (technical)
f) carcinogenicity	No carcinogenic potential NOAEL (dog) = 3.0 mg/kg bw/day NOAEL (rat) = 4.9 mg/ kg bw/day NOAEL (mouse) = 7.1 mg/kg bw/day	Dog: 104 weeks Rat: 2-year Mouse: 18 month	rat, mouse, dog	active substance (technical)

	endpoint	duration	species	tested on
g) reproductive toxicity	on animal tests parents: reduced body weight with reproduction: less yellow body and less offspring first generation: less survivors and body weight	two generation study	rat & rabbit	active substance (technical)
h) STOT-single exposure	no data available			
i) STOT-repeated exposure	no data available			
j) aspiration hazard	niet relevant			

Section 12: Ecological information

12.1 Toxicity

	endpoint	duration	species	tested on
Acute toxicity fish	EC50 ≥ 100 mg/L	96h	Oncorhynchus mykiss	formulated product
Acute toxicity invertebrates	EC50 = 64.1 mg/L	48h	Daphnia magna	formulated product
Algae	ErC50 = 5.51 mg/L	72h	Rhaphidocelis subcapitata	formulated product
Aquatic plants	EbC50 = 0.4 mg/L ErC50 = 0.8 mg/L	7 days (semi-static)	lemna gibba	substance active (technique)

12.2 Persistence and degradability

metamitron:

DT50 (soil) = 22 days

DT50 (water) = 19 days

DT50 (water/sediment) = 11.41 days

desamino-metamitron:

DT50 soil = 30.5 days

12.3 Bioaccumulative potential

metamitron: log Pow = 0.85-0.96

desamino-metamitron: log Pow = 1.43-2.46

12.4 Mobility in soil

metamitron: Koc = 86.4

desamino-metamitron: Koc = 102.5

12.5 Results of PBT and vPvB assessment

The active substance does not fulfill the criteria of a persistent, bioaccumulative and toxic (PBT) substance, nor of a very persistent and very bioaccumulative (vPvB) substance, as outlined in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects

/

Section 13 : Disposal considerations

13.1 Waste treatment methods

Product waste: prevent spreading. To be disposed of in compliance with local and national prescriptions.

Polluted packages: Do not re-use empty packages. If required, rinse 3 times. To be disposed of in compliance with local and national prescriptions.

Section 14: Transport information

	ADR classification	IMDG classification	IATA classification
14.1 UN number	3082	3082	3082
14.2 UN proper shipping name	environmentally hazardous substance, liquid, N.O.S. (aclonifen)	environmentally hazardous substance, liquid, N.O.S. (aclonifen)	environmentally hazardous substance, liquid, N.O.S. (aclonifen)
14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	III	III	III
14.5 Environmental hazards	yes	yes	yes
14.6 Special precautions for user	Symbols: Tunnel code: /	Symbols: 	Symbols:
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable for road transport	Not applicable (not transported as bulk)	Not applicable for air transport

Section 15 : Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SEVESO:

- SEVESO category: E1

- Named dangerous substances: /

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16 : Other information

Relevant H-phrases

H302: Harmful if swallowed.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H317: May cause an allergic skin reaction.

H314: Causes severe skin burns.

List of abbreviations and acronyms

RRN: REACh registration number

Changes to the previous version of safety data sheet: /

The information presented in this SDS is based on the current knowledge of the product and is derived from the existing literature. It is given in good faith and it only illustrates the aspect of security. This SDS is in addition with our information relating to the use of the formulation but in no case replaces it.

The users must be aware of the necessary precautions to take at the time of use or handling of this product.

Consequently, the company can in no case be held responsible for damage which results, directly or indirectly, from the use of these data.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008, Regulation (EU) No 453/2010 and Regulation (EU) No 2015/830.