Safety data sheet

IT METAMITRON SC

1. Identification of the substance/preparation and of the company/undertaking

MAPP 13059
Revised: 01-06-2009/ HSV
Replaces: 14-04-2009
Product use: Herbicide
A contact and residual herbicide for use in sugar beet, fodder beet, red beet and mangels.

Supplier
INTER-TRADE AALBORG A/S
Halsvej 139
DK-9310 Vodskov, Denmark
Denmark: Tel:+45 9825 7700 Fax:+45 9825 7710
Emergency telephone number: +45 9825 7700
Email: inter@mail.tele.dk

2. Hazards identification

Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Additional information
Persons with a known allergy to 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one may exhibit an allergic response to the product.

3. Composition/information on ingredients

Einecs no.	CAS No.	Substances	Classification	w/w%
220-239-6	2682-20-4	2-methyl-2H-isothiazol-3-one	T;R23/24/25 C;R34 R43 N;R50/53	<1
255-349-3	41394-05-2	Metamitron	Xi;R22 N;R50/53	57,9 (700g/l)
247-500-7	26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	T;R23/24/25 C;R34 R43 N;R50/53	<1
220-239-6	2682-20-4	2-methyl-2H-isothiazol-3-one	T;R23/24/25 C;R34 R43 N;R50/53	<1

Please see section 16 for the full text of the R-phrases

4. First aid measures

Inhalation
Seek fresh air. Seek medical advice in case of persistent discomfort.
Ingestion
Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Induce vomiting if victim is conscious. Seek medical advice immediately.
Skin
Remove contaminated clothing. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.
Eyes
Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.
Other information
When obtaining medical advice, show the safety data sheet or label. Symptoms: See section 11.

5. Fire-fighting measures

Extinguish with powder, foam, carbon dioxide or water mist. Do not use water stream, as it may spread the fire. Use water or water mist to cool non-ignited stock. Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases – seek fresh air.

6. Accidental release measures

Use the same personal protective equipment as stated in section 8. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains. Prevent spillage from entering drains and/or surface water. Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. See section 13 for instructions on disposal.

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7. Handling and storage

Handling
See section 8 for information about precautions for use and personal protective equipment.
Storage
Keep out of reach of children. Do not store together with food, drink and animal feeding stuffs. Keep in tightly closed packaging. Store frost-free.
Shake thoroughly before use.

8. Exposure controls/ personal protection

Precautions for use
Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work.
Remove contaminated clothing as soon as possible during work.
Respiratory protection
Preparation: Not required.
Application by tractor, spreader bar, closed cabin, ventilation system off: Not required.
Gloves and protective clothing
Preparation: Wear gloves and boots.
Application by tractor, spreader bar, closed cabin, ventilation system off: Wear protective suit, gloves and boots.
Eye protection
Preparation: Wear safety goggles.
Application by tractor, spreader bar, closed cabin, ventilation system off: Not required.
Occupational exposure limits
Contains no substances subject to reporting requirements.

9. Physical and chemical properties

Appearance: Suspension
Density: 1.21 g/ml

10. Stability and reactivity

The product is stable when used in accordance with the supplier's directions.

11. Toxicological information

Acute
Inhalation
The product does not release hazardous vapours.
Ingestion
Harmful if swallowed. Symptoms of poisoning include indisposition, nausea, headache, sweating.
Skin contact
May cause slight irritation.
Eye contact
May cause eye irritation.
Risk of sensitization
The product contains small amounts of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. Persons with a known allergy may exhibit an allergic response to the product.
Long-term effects
None known.

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12. Ecological information

Avoid discharge to drain or surface water.
Ecotoxicity
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site. Wash out container thoroughly, empty washings into spray tank, and dispose of safely. Do not re-use container for any purpose.
EWC code: Depends on line of business and use, for instance 02 01 08 agrochemical waste containing dangerous substances.
Absorbents/cloth contaminated with the product.
EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

14. Transport information

The product must be bontored/ in accordance with national and/or international rules for transport of dangerous goods by road and sea according to ADR and IMDG.
ADR: UN 3082 ; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metamitron) ; 9 ; III ; E
IMDG: UN 3082 ; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metamitron) ; 9 ; III

Classification code: M6 Label ADR: 9 Hazard identification number: 90
Flash point: >°C Label IMDG: 9 IMDG EmS:- F-A, S-F
Transport according to ADR 1.1.3.6.Factor: 1. Maximum total quantity per transport unit: 1 000 l/kg.
The product is environmentally hazardous.
Limited quantities
ADR: Maximum quantity: 5 L per inner packaging and 30 kg per package for combination packaging. When using shrink or stretch wrapping, the limit is 5 L per inner packaging and 20 kg per package (inner packagings must be made of metal or plastic which does not break or perforate easily).
IMDG:Maximum quantity: 5 L per inner packaging and 30 kg per package for combination packaging. When using shrink or stretch wrapping, the limit is 20 kg gross per package (inner packagings must be made of metal or plastic which does not break or perforate easily).

15. Regulatory information

Hazard designation: Harmful; Dangerous for the environment
Hazard symbols: Xn;N
Contains
Metamitron
R-phrases
Harmful if swallowed. (R22)
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (R50/53)
S-phrases
Keep out of the reach of children. (S2)
Keep away from food, drink and animal feeding stuffs. (S13)
Wear suitable gloves. (S37)
In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). (S45)
Keep only in the original container. (S49)
Avoid release to the environment. Refer to special instructions/safety data sheet. (S61)
Other labelling
Contains 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
Read all other safety precautions and directions for use before use.
To avoid risks to man and the environment, comply with the instructions for use.
Safety data sheet available for professional user on request.
Chemical safety assessment
Chemical safety assessment has not been performed.

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16. Other information

Restrictions on use
For use only as an agricultural/horticultural herbicide.
Training requirement
No special training is required, but a thorough knowledge of this data safety sheet should be a prerequisite condition.
Line of business
Agriculture and horticulture.
Sources used
ADR 2009 edition and IMDG 2008 edition.
SI 2002/1688 Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 + Directive 2006/8/EC.
Danish Working Environment Authority's List (seventh edition): Information approved for the classification and labelling of substances and preparations dangerous for supply. Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, 29./06.'01. ATP.
EH40/2005 Workplace exposure limits.
Commission decision as regards the list of wastes 2001/118/EC.
The compilation of safety data sheets (third edition) 2002.
This product is approved under the Control of Pesticides Regulations 1986.
Amended by PSD letter of approval of 11/08/2006.
Other information
This safety data sheet was prepared from information provided by the supplier about physical/chemical properties and all ingredients in the product.
Full text of the R-phrases that are stated in section 3.
R22 Harmful if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Amendments have been made in the following sections
1,16

Chemitor A/S, Pakhusbrovet 4, 6000 Kolding Tlf.: +45 75508811, Fax: +45 75508810, E-mail: Chemitor@Chemitox.dk (Made in Tuxedo®)

146 mm

CCL Label A/S
Telefon 8710 8710
Telefax 8710 8760

OB-nr.: 30702356
Deres nr.:
Dato: 2009.06.30
Etiket str.: 135x175 mm
Farver: Sort + P reflex blå + P021
Korrektur nr.: 6

Godkendt
Godkendt med rettelse
Ny korrektur fremsendes

Sign.

LIMSIDE

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IT METAMITRON SC

MAPP 13059

contains 700 g/l (57.9 % w/w) metamitron in a suspension concentrate

Open here

A contact and residual herbicide for use in sugar beet, fodder beet, red beet and mangels.

Harmful if swallowed

HARMFUL

Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment

DANGEROUS FOR THE ENVIRONMENT

Contains 5-chloro-2-methyl-2H-isothiazol-3-one (3 parts) and 2-methyl-2H-isothiazol-3-one (1 part): may produce an allergic reaction.

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

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.
WASH HANDS AND EXPOSED SKIN before meals and after work.
IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).
If swallowed, seek medical advice immediately and show this container or label.
Environmental protection
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.
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.
This material and its container must be disposed of in a safe way.
DO NOT RE-USE CONTAINER for any purpose.
WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank, and dispose of safely.
This product is approved under the Control of Pesticides Regulations 1986.

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE

Crops:	Sugar beet, fodder beet, red beet, mangels
Maximum individual dose:	5 litres product per ha
Maximum total dose:	15 litres product per ha per crop

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.

To avoid risks to man and the environment, comply with the instructions for use.
Safety data sheet available for professional user on request.

INTER-TRADE AALBORG A/S Contents: **5 litres**
Halsvej 139
9310 Vodskov SHAKE THOROUGHLY BEFORE USE
Denmark
Tel: +45 98 93 89 77 PROTECT FROM FROST

Batch No:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (contains metamitron). UN 3082; Class 9; Packing Group III

06/09

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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.

ACTIVITY

IT Metamitron SC is both an effective soil-acting herbicide with residual activity and a contact, foliar herbicide. From the soil, metamitron is taken up in solution by the roots of weeds. Hence soil moisture is necessary for good residual activity. The full course of recommended treatments must be applied to gain the maximum benefits of residual activity. Metamitron becomes bound onto soil organic matter and progressively loses activity in soils containing 10% or more organic matter. On organic soils the foliar activity of IT Metamitron SC must be fully employed for best results – see REPEAT LOW-DOSE TREATMENTS.

FULL-DOSE TREATMENT

A full-dose treatment (Option 1, 2 or 3 in Table A) is suitable for crops of sugar beet, red beet, fodder beet and mangels on all mineral soils with an organic matter content of less than 10%, excepting those soils classed as Sands (Soil Texture 85 system). Do not treat crops growing on Sands.

Table A
Full-Dose Treatments

Timing options	Latest weed stages	Method and remarks
1. Before drilling	-	Lightly incorporate into the surface 25 mm (1") soil
2. After drilling but before crop emergence.	Pre-emergence	Apply to a fine, firm, moist soil at or soon after drilling.
3. When the crop has at least 2 true-leaves 10 mm long	Normally cotyledon stage but under favourable conditions weeds up to first true-leaf can be treated.	The addition of adjuvant oil ADJ 0195 at 5 l/ha is recommended if the weeds are beyond the cotyledon stage or the weather is dry.

Product rate of use and application
5 l/ha in 200 l/ha water as a MEDIUM spray (BCPC).

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IT METAMITRON SC

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Harmful if swallowed

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Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment

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

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FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE

Crops:	Sugar beet, fodder beet, red beet, mangels
Maximum individual dose:	5 litres product per ha
Maximum total dose:	15 litres product per ha per crop

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.

To avoid risks to man and the environment, comply with the instructions for use.
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Halsvej 139
9310 Vodskov SHAKE THOROUGHLY BEFORE USE
Denmark
Tel: +45 98 93 89 77 PROTECT FROM FROST

Batch No:

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Operator protection
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KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
This material and its container must be disposed of in a safe way.
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WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank, and dispose of safely.
This product is approved under the Control of Pesticides Regulations 1986.

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REPEAT LOW-DOSE TREATMENTS

MINERAL SOILS
(Excluding Sands and soils with organic matter of 10% or more)

Step 1 Ideally apply a base application, chosen from Table B, of IT Metamitron SC pre-emergence of the crop and weeds.

Table B
Base Application

Timing options	Method and remarks
Before drilling	Lightly incorporate into the surface 25 mm (1") soil
Before crop emergence	Spray before weed emergence

Product rate of use and application
3 l/ha in 200 l/ha water as a MEDIUM spray (BCPC)

Step 2 Follow the base application with a series of up to three low-dose treatments chosen from Table C. If the base application is not made then up to five low-dose treatments may be required. Apply the final treatment 7-10 days after the treatment made to control the final emergence of weeds.

ORGANIC SOILS
(Organic matter 10% or more)
No base application can be recommended for these soils. Apply a series of up to six low-dose treatments chosen from Table C to achieve weed control. Apply the final treatment 7-10 days after the treatment made to control the final emergence of weeds.

Table C
Low-Dose Treatments

Treatment selection	Conditions and remarks	Rates of use	Earliest crop stage	Latest weed stage
Standard	For mineral and organic soils.	IT Metamitron SC at 1.7 l/ha plus adjuvant oil ADJ 0195 at 1.7 l/ha.	Any	Early cotyledon
Super	For organic soils to control weeds already past the early cotyledon stage. Normally use just the once amongst standard treatments.	IT Metamitron SC at 2.5 l/ha plus adjuvant oil ADJ 0195 at 2.5 l/ha.	After the first pair of true-leaves (at least 10mm long).	1 true-leaf

Application
Apply in 80-100 litres of water per ha as a FINE spray (BCPC) at 3-5 bar.

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GENERAL CONDITIONS

- treat only vigorous, healthy crops growing under good soil and weather conditions.
- do not treat diseased crops or those suffering pest attack.
- do not apply during prolonged cold or frosty weather. Treated crops subjected to frost within 7 days of treatment may be checked and may not regain their vigour fully.
- do not treat crops suffering herbicide damage, drought or other stress.

Crop stress might be caused additionally by high light intensity, wind, cold nights following warm days, soil acidity, and low major or minor nutrient status. If stress or other negative conditions upon growth are influential at application or subsequently, growth may be further checked and yield might be reduced. Several factors might combine to magnify minor stresses on the crop. The use of adjuvant oil in spray mixtures tends to increase stress upon a crop. Conditions leading to severe plant stress might result in some crop loss.

SOIL CONDITIONS

A firm, fine, moist soil is essential for optimum results; efficacy is reduced when the soil is dry. In the absence of rain, efficacy of a pre-emergence application on a dry soil is improved by light irrigation.

APPLICATION

Apply IT Metamitron SC in the water volume and manner recommended at the foot of the appropriate Table.
Use filters not finer than 80 mesh in spray lines and nozzles. Do not exceed 8 kph (5 mph) when spraying. Avoid spray drift.

SPRAY MIXING

Shake the container thoroughly before opening. Half-fill the spray tank with clean water and begin agitation. Slowly add the required quantity of IT Metamitron SC directly to the spray tank. Top up the spray tank with water and keep under constant agitation before, during and until completion of spraying. Thoroughly clean all equipment after use.

COMPATIBILITY

IT Metamitron SC is physically compatible in tank-mix with the authorised adjuvant and approved formulations listed below. When tank-mixing IT Metamitron SC with a partner, the recommendations and conditions of the partner product must be strictly observed, together with the recommendations and conditions of this label. Mix IT Metamitron SC in the spray tank first unless directed otherwise.

Adjuvant oil	ADJ 0195
Ethofumesate	MAFF 08154

PROCESSED CROPS OF RED BEET

Processors of red beet should be consulted before treating crops in which they have an interest.

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SUCCEEDING CROPS

Mould-board ploughing at least 15 cm (6") deep is required before a following crop. Winter cereals may be drilled 16 weeks after the last application of IT Metamitron SC and any crop may be planted in the following spring. Only sugar beet, fodder beet, red beet or mangels may be sown within 16 weeks of the last application. Due consideration must also be given to the restrictions imposed by other products that might have been used on the same crop.

ROUTINE SPRAYER MAINTENANCE

Thoroughly clean all equipment immediately after use with water and a wetting agent. Flush out the cleaning solution with at least two fillings of clean water. Traces of herbicide can damage susceptible crops.

WEED CONTROL

The susceptibility of weeds up to their cotyledon stage is indicated for IT Metamitron SC when applied alone under optimum soil and weather conditions. Susceptibilities of certain weeds vary according to the time or method of application.

Weeds showing a constant response to pre-emergence and early post-emergence (cotyledon stage) treatment

Chickweed, common	S
Field-speedwell, common	S
Marigold, corn	S
Mayweed, scentless	S
Nettle, small	S
Penny-cress, field	S
Poppy, common	S
Shepherd's-purse	S
Spurrey, corn	S
Charlock	MS
Fumitory, common	MS
Redshank	MS
Black-bindweed	MR
Cleavers	R
Wild-oat	R

Weeds showing a lower susceptibility to post-emergence applications

	Pre-em	Post-em
Fat-hen	S	MS
Groundsel	S	MS
Knotgrass	S	MS
Meadow-grass, annual	S	MS

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Weeds showing a response to full-dose pre-emergence treatment only

Nightshade, black	MR
Pimpernel, scarlet	MR
Radish, wild	MR

S = Susceptible
MS = Moderately Susceptible
MR = Moderately Resistant
R = Resistant

SOIL TEXTURE (85 System)

Sands	Very light soils	Light soils	Medium soils	Heavy soils
Coarse sand	Loamy sand	Sandy loam	Sandy clay loam	Sandy clay
Sand	Loamy fine sand	Fine sandy loam	Clay loam	Clay
Fine sand	Coarse sandy loam	Sandy silt loam	Silty clay loam	Silty clay
Loamy coarse sand		Silt loam (85)		

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 storage, handling, mixing or use, or of the weather conditions before, during and 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 resellers 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.

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