



## Identification of the substance or mixture and of the company/undertaking

### **Product identifier.**

Metamitron (BSI, E-ISO); métamitron ((f) F-ISO); methiamitron (Belgium)

### **Relevant identified uses of the substance or mixture and uses advised against**

Herbicide

### **Details of the supplier of the safety data sheet.**

SPARCHEM

159, Ashoka Shopping Centre, 2nd Flr.,

L.T. Marg, Mumbai - 400001,

Telephone number: 0091- 22-22642642

E-mail: response@sparchem.com

### **Emergency telephone number**

0091- 22-22642642

## Hazards identification

### **Classification of the substance or mixture**

Classification as per Directives 67/548/EEC:

Xn; R22

N; R50

### **Classification as per Regulation (EC) No 1272/2008:**

Acute Tox. 4 \*, H302

Aquatic Acute 1, H400

### **Label elements - Pictogram, Signal Word Code(s)**

GHS07

GHS09

**Hazard statement Code(s)**

H302: Harmful if swallowed.

H400: Very toxic to aquatic life.

**Precautionary Statements**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P273: Avoid release to the environment.

P391: Collect spillage

P501: Dispose of contents/container in accordance with local/regional/national/regulation.

**Other hazards**

Very toxic to aquatic life with long lasting effects. Does not meet the criteria for vPvB in accordance with Annex XIII of REACH.

**Composition/information on ingredients****Substances**

Chemical name	CAS No/ EC No	Index No.	Classification (Directives 67/548/EEC)	Classification (Regulation (EC) No 1272/2008)	Con. % w/w
Metamitron (ISO); 4-amino-3-methyl-6- phenyl-1,2,4-triazin-5-one	41394-05- 2/ 255-349-3	613-129-00- 8	Xn; R22 N; R50	Acute Tox. 4 *, H302 Aquatic Acute 1, H400	98.0 (min

**First aid measures****Description of first aid measures**

IF SWALLOWED, Call a POISON CENTRE or doctor/physician if you feel unwell. Keep the person calm and comfortable. Rinse mouth.

IF EYE CONTACT, immediately flush with plenty of water at least for 15 minutes.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Most important symptoms and effects, both acute and delayed**

Symptoms of poisoning include indisposition, nausea, headache, sweating

**Indication of any immediate medical attention and special treatment needed**

No specific antidote known. Treat symptomatically and give supportive therapy.

**Firefighting measures****Extinguishing media**

If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand. Keep nearby containers and equipment cool with a water stream.

**Special hazards arising from the substance or mixture**

May give off toxic fumes if heated to decomposition. Do not breathe fumes. Wear self contained breathing apparatus.

**Advice for firefighters**

Whenever this product involved in a major fire, firefighters to wear boots, overalls, gloves, eye and face protection and breathing apparatus. Keep containers cool with water spray

**Accidental release measures****Personal precautions, protective equipment and emergency procedures.**

Avoid build up of dust. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing

**Environmental precautions**

Do not discharge into the drains/surface water/groundwater

**Methods and material for containment and cleaning up**

Transfer any product remaining in damaged or leaking containers into a clean, empty drum, and label the drum. Absorb spillage and cover contaminated areas with sawdust, and, earth, or other absorbent material and place in a secure container for safe disposal. Clean contaminated floors and objects thoroughly with plenty of water, observing environmental regulations

**Reference to other sections**

Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

## Handling and storage

### **Precautions for safe handling**

Ensure good ventilation. Avoid build up of dust. Wear full protective clothing. Eating, drinking and smoking should be prohibited during handling. Wash hands after use and to remove contaminated clothing and protective equipment before entering eating areas.

### **Conditions for safe storage, including any incompatibilities**

It should be stored in clearly labelled rigid and leak proof containers and away from containers of food and drink. Storage should be under lock and key and secure from access by children and other unauthorized persons. Store in a well-ventilated place. Do not store together with oxidizing & strong alkalies agents

### **Specific end use(s)**

Avoid build up of dust. When opening a container and mixing, protective impermeable boots, clean overalls impermeable gloves, eye protection and a respirator should be worn. Avoid contact to mouth and eyes. Before eating, drinking or smoking, hands and other exposed skin should be thoroughly washed.

## Exposure controls/personal protection

### **Control parameters**

#### **Occupational exposure limit**

Not available

#### **DNEL and PNEC values**

Selenastrum capricornutum: an EC50 of 0.14 mg/L and NOEC of 0.1 mg/L. The lowest EC50 of 0.14 mg/L is divided by a factor of 100, which results in a PNEC of 0.0014 mg/L.

DNEL: Not available

#### **Exposure controls**

#### **Appropriate engineering controls**

Mechanical ventilation should be used when handling this product in closed spaces.

#### **Individual protection measures, such as personal protective equipment**

#### **General precautions**

Do not inhale dust.

#### **Eye/face protection**

Wear safety goggles with imperforated side shield and face shield.

#### **Skin protection**

Avoid contact with skin. Wear apron, boots and full protective suit.

#### **Respiratory protection**

Use dust mask. Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure.

**Thermal hazards**

Whenever this product involved in a major fire, firefighters to wear boots, overalls, gloves, eye and face protection and breathing apparatus.

**Environmental exposure controls**

Keep away from food, drink and animal feed stuff. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheet.

**Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

Yellowish powder

**Odour**

Odourless

**Odour threshold**

Not available

**PH**

Not available

**Melting point/freezing point**

166.9 0C

**Initial boiling point and boiling range**

Not available

**Flash point****Evaporation rate**

Not available

**Flammability (solid, gas)**

Non-relevant

**Upper/lower flammability or explosive limits**

Non-explosive

**Vapour pressure**

$8.6 \times 10^{-4}$  mPa (20 °C);  $2 \times 10^{-3}$  mPa (25 °C)

**Relative density**

1.35 g/cm<sup>3</sup> (22.5 °C)

**Solubility(ies)**

In water 1.7 g/l (20 °C). In dichloromethane 30-50, cyclohexanone 10-50, isopropanol 5.7, toluene 2.8, hexane <0.1, methanol 23, ethanol 1.1, chloroform 29 (all in g/l, 20 °C)

**Partition coefficient: n-octanol/water**

KOW logP =0.83

**Auto-ignition temperature**

Not available

**Decomposition temperature**

Thermal decomposition at 170°C

## Viscosity

### Explosive properties

Non-explosive

### Oxidising properties

Non-oxidizer

### Other information

Henry:  $1 \times 10^{-7}$  Pa m<sup>3</sup> mol<sup>-1</sup> (20 °C, calc.)

## Stability and reactivity

Reactivity	:	Unstable in alkaline media.
Chemical stability	:	Stable for two years at ambient conditions.
Possibility of hazardous reactions	:	Reactions with strong alkalis. Incompatible with oxidizing materials.
Conditions to avoid	:	Avoid excessive heat and flame.
Incompatible materials	:	Oxidizing agents, alkali.
Hazardous decomposition products	:	Hydrogen Cyanide, nitrogen oxides, carbon monoxide.

## Toxicological information

### Information on toxicological effects

Acute toxicity, oral, dermal, inhalation	:	Oral LD50: 1200 mg/kg bw (Rats) Dermal LD50: >4000 mg/kg bw (Rats) Inhalation LC50 : >0.33 mg/l air (aerosol) (Rats)
skin corrosion/irritation	:	Non-irritant to skin of rabbits
serious eye damage/irritation	:	Non-irritant to eye of rabbits
respiratory or skin sensitisation	:	Non-sensitiser to skin of Guinea pigs
germ cell mutagenicity	:	Non-mutagenic
Carcinogenicity	:	Non-carcinogenic
Reproductive toxicity	:	Non-reprotoxic and teratogenic
STOT-single exposure	:	Not applicable
STOT-repeated exposure	:	Not applicable
Aspiration hazard	:	Chemical pneumonitis resulting from aspiration of the solvent into the lungs is a hazard that occurs when liquid formulations are used.

## Ecological information

### Toxicity

Fish, golden orfe	:	LC50 (96 h): 443 mg/l
<i>Daphnia magna</i>	:	LC50 (48 h) 101.7-206 mg/l
<i>Selenastrum capricornutum</i> :	:	EC50 :0.14 mg/l
Bees	:	Not toxic to bees
Earthworms, <i>Eisenia foetida</i>	:	LC50 :>1000 mg/kg dry soil
Birds, Japanese Quails	:	LD50: 1875-1930 mg/kg
Persistence and degradability	:	In soil, met amitron is degraded very rapidly. Rapid photodecomposition on soil surfaces and in aqueous solution is an important process for the degradation of met amitron in the environment. Soil: Half-life time (t <sub>1/2</sub> ): 30-90 days. Degradation is primarily via: hydrolysis, microorganisms.
Bioaccumulative potential	:	Met amitron is not expected to bioaccumulate.
Mobility in soil	:	Leaching behaviour can be classified as medium mobile; no leaching into groundwater occurred.
Results of PBT and vPvB assessment	:	Very toxic to aquatic life. Does not meet the criteria for vPvB in accordance with Annex XIII of REACH.
Other adverse effects	:	When used as recommended, it is unlikely that met amitron or its degradation products will reach levels of adverse environmental significance.

## Disposal considerations

### Waste treatment methods

#### Product Disposal

Avoid exposure, if possible by the use of appropriate protective clothing and masks. Dispose of in a pesticide approved landfill, or in a chemical incinerator equipped with scrubbers. Dispose in a safe manner in accordance with local/national regulations

Never pour waste or surplus products into public sewers or where there is any danger of run-off or seepage to streams, watercourses, open waterways, ditches, fields with drainage systems, or to the catchment areas of boreholes, wells, springs, or ponds.

#### Package disposal

Puncture containers to prevent reuse. Dispose of container in accordance with local regulation.

## Transport information

UN number	:	3077
UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Transport hazard class(es)	:	ADR: 9 IMDG: 9 ICAO/IATA: 9 RID: 9
Packing group	:	III
Environmental hazards	:	Metamitron designated as marine pollutant.
Special precautions for user	:	Ensure that containers are sound and that labels are securely fixed and undamaged before dispatch. Do not load together with food and animal feed.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	:	Not relevant

## Regulatory information

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

Metamitron has been classified under Dangerous substances Directive 67/548/EEC & Regulation No 1272/2008.

### **Chemical safety assessment**

Risk assessment has been performed by European Food Safety Authority (EFSA).

## Other information

### **Indication of changes**

Changes have been made in all section.

### **Abbreviations and acronyms**

LD50: Lethal Dose, 50%

LC50: Lethal Concentration, 50%

STOT: Specific Target Organ Toxicity

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

ADR: International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

ICAO/IATA: International Civil Aviation Organization /International Airlines Travel Agent

RID: International Carriage of Dangerous Goods by Rail



### **Key literature references and sources for data**

World Health Organization for the International Programme on Chemical Safety.

-BCPC, Pesticide Manual.

- Vedlegg for Metamitron. Kilde: Svensk undersøkelse 2004

- Summary of the EFSA Scientific Report (2008) 185, 1-95, Conclusion on the peer review of metamitron.

Text of R-phrases mentioned in Section 3:

R22: Harmful if swallowed.

R50: Very toxic to aquatic organisms.

### **Text of the hazard statements mentioned in Section 3:**

H302: Harmful if swallowed.

H400: Very toxic to aquatic life.

### **Training**

Training of workers in techniques to avoid contact with substance is essential.

### **Liability**

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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