

BETTIX FLO

Preparation Date 25-Mar-2014

Revision date 11-Dec-2014

Revision Number: 2

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

1.1 Identification of the product

Product code HBT01
Product Description: BETTIX FLO
Synonyms METAMITRON 700 SC
Pure substance/preparation Preparation

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use Herbicide

1.3 Details of the Supplier of the Safety Data Sheet

Supplier UPL Europe Ltd
The Centre
Birchwood Park
Warrington
WA3 6YNCheshire
UK
Tel. : +44 (0) 1925 819999
Fax : +44 (0)1925 856075
E-mail address info.uk@uniphos.com

1.4 Emergency Telephone Number

Emergency telephone number **(CARECHEM 24): +44 (0) 1235 239670**

United Kingdom NHS no. 111

2. Hazards Identification

2.1 Classification of the mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) N - Dangerous for the environment

R-code(s) N;R51/53

For the full text of the R phrases mentioned in this Section, see Section 16

Classification according to regulation (EC) No 1272/2008 (CLP)

Acute aquatic toxicity Acute 1 - H400
Chronic aquatic toxicity Chronic 1 - H410

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labelling according to EU Directives 67/548/EEC or 1999/45/EC



Symbol(s)

N - Dangerous for the environment

R -phrase(s)

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S -phrase(s)

S13 - Keep away from food, drink and animal feedingstuffs
S35 - This material and its container must be disposed of in a safe way
S46 - If swallowed, seek medical advice immediately and show this container or label
S57 - Use appropriate container to avoid environmental contamination

Labelling according Regulation (EC) No 1272/2008 (CLP)



signal word

WARNING

hazard statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/ container in accordance with national regulation

EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other Hazards

No information available

3. Composition/information on Ingredients**3.2. MIXTURES**

Chemical name	EC No	CAS-No	Weight %	Classification (Dir.67/548)	EU - GHS Substance Classification	REACH No.
Metamitron	255-349-3	41394-05-2	50 - 60	Xn; R22 N; R50	Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	no data available
sodium alkylnaphthalene sulphonate, formaldehyde condensate	-	-	1 - 5	Xi;R36/38	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	no data available
Aqueous dipropylene glycol solution of approx. 20% 1,2-benzisothiazolin-3-one (2634-33-5 (17-23% + 1310-73-2 (5-15%))	-	-	< 1	C; R34 Xn; R22 Xi; R43 N; R50	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	-
Ethylene glycol	203-473-3	107-21-1	5 - 10	Xn;R22	Acute Tox. 4 (H302)	no data available
sulfated ethoxylates of polyarylphenol	-	-	1 - 5	Xi,R41	Eye Dam. 1 (H318)	no data available

For the full text of the R phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First aid measures

4.1 Description of first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes If eye irritation persists, consult a specialist
Skin contact	Wash off immediately with plenty of water
Ingestion	Do NOT induce vomiting Call a POISON CENTER or doctor/physician if exposed or you feel unwell
Inhalation	Move to fresh air Call a POISON CENTER or doctor/physician if you feel unwell

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray Dry powder Foam Carbon dioxide (CO ₂)
Unsuitable extinguishing media	No information available.

5.2 Special hazards arising from the substance or mixture

Special Hazard	Thermal decomposition may release toxic fumes.
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5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas
Wear protective gloves/clothing and eye/face protection.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so
Do not allow material to contaminate ground water system
Do not flush into surface water or sanitary sewer system

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Provide adequate ventilation
Wear personal protective equipment
Ensure that eyewash stations and safety showers are close to the workstation location

Hygiene Measures

Do not eat, drink or smoke when using this product
Wash hands after handling

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place

7.3 Specific end uses

No information available.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits

Apply technical measures to comply with the occupational exposure limits

Chemical name	Eu	United Kingdom	France	Spain	Germany
Ethylene glycol	S* TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³	STEL: 40 ppm STEL: 104 mg/m ³ STEL: 30 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ TWA: 10 mg/m ³ Skin	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³	S* STEL: 40 ppm STEL: 104 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³	MAK: 10 ppm MAK: 26 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 52 mg/m ³ Skin TWA: 10 ppm TWA: 26 mg/m ³
Component	Italy	Portugal	Netherlands	Finland	Denmark
Ethylene glycol 107-21-1 (5 - 10)	TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin	Ceiling: 100 mg/m ³	Skin STEL: 104 mg/m ³ TWA: 52 mg/m ³ TWA: 10 mg/m ³	TWA: 20 ppm TWA: 50 mg/m ³ STEL: 40 ppm STEL: 100 mg/m ³ Skin	TWA: 10 ppm TWA: 26 mg/m ³ TWA: 10 mg/m ³ Skin
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethylene glycol	Skin STEL 20 ppm STEL 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	Skin STEL: 20 ppm STEL: 52 mg/m ³ TWA: 10 ppm TWA: 26 mg/m ³	STEL: 50 mg/m ³ TWA: 15 mg/m ³	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ Skin Ceiling: 25 ppm STEL: 104 mg/m ³ STEL: 40 ppm	TWA: 10 mg/m ³ TWA: 20 ppm TWA: 52 mg/m ³ STEL: 40 ppm STEL: 104 mg/m ³ Skin

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure Controls

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye protection Safety glasses with side-shields.
Skin protection Long sleeved clothing.
Hand protection Protective gloves.
Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Environmental exposure controls No information available.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

appearance	Off-white (white; Yellowish White)	
Physical state	liquid suspension concentrate	
Odor	paint like	
Property	VALUES	Remarks/ Method
pH	8	(1% solution)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
flash point	112 °C	
flammability (solid, gas)	No information available	
Surface tension	51.8 mN/m	20°C
Relative Density	1.203	
Water solubility	dispersible	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
decomposition temperature	No information available	
viscosity	55 - 324	20 °C, Dynamic viscosity
Oxidizing properties	Non oxidizing	
Explosive properties	According to the chemical structure no explosion reaction is expected.	

9.2 OTHER INFORMATION

VOC Content No information available

10. Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5 Incompatible Materials

Strong acids
Strong oxidizing agents

10.6 Hazardous Decomposition Products

Thermal decomposition giving flammable and toxic products.

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

Local effects

Inhalation

There is no data available for this product.

Eye contact

No eye irritation.

Skin contact

No skin irritation.

Ingestion

There is no data available for this product.

LD50 Oral

> 2000 mg/kg

LD50 Dermal

> 2000 mg/kg

LC50 Inhalation:

> 3.49 mg/l

Chronic toxicity

Skin Corrosion/Irritation

No information available.

sensitization

Did not cause sensitization.

Carcinogenic effects

No information available

Mutagenic effects

No information available

Reproductive effects

No information available

STOT - Single Exposure

No information available.

STOT - Repeated Exposure

No information available.

12. Ecological Information

12.1 Toxicity

EC50/72h/algae = 2.32 mg/l

LC50/48h/daphnia = > 100 mg/l

LC50/fish/96 h = > 100 mg/l

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

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

Chemical name	Log Pow
Metamitron	0.83
Ethylene glycol	-1.93

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other Adverse Effects

No information available.

13. Disposal Considerations

13.1 Waste Treatment Methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

EWC waste disposal No

020108 - agrochemical waste containing dangerous substances.

OTHER INFORMATION

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

14. Transport Information

ADR/RID

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. Metamitron
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	274, 335, 601
Tunnel restriction code	(E)

IMDG/IMO

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s Metamitron
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	Marine Pollutant
14.6 Special Provisions	274, 335

IATA/ICAO

14.1 UN-No	UN3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s Metamitron
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	A97, A158

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Registration n° MAPP 16559 (Replaces MAPP 11959)

- To avoid risks to man and the environment, comply with the instructions for use

International Inventories

TSCA	Complies
EINECS/ ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
China	-
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16. Other Information**Full text of R-phrases referred to under sections 2 and 3**

R22 - Harmful if swallowed

R34 - Causes burns

R41 - Risk of serious damage to eyes

R43 - May cause sensitization by skin contact

R50 - Very toxic to aquatic organisms

R36/38 - Irritating to eyes and skin

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Revision date 11-Dec-2014**Revision note** Not applicable**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information contained is based on our knowledge of the product at the date of publishing.

It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear.

Users are advised of possible additional hazards when the product is used in applications for which it was not intended.

This sheet shall only be used and duplicated for prevention and Safety purposes.

For rates and use recommendations, refer to the information displayed on the packaging.

It is the responsibility of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.

End of Safety Data Sheet