SAFETY DATA SHEET



ASULOX

Preparation Date 02-Apr-2013 Revision Date 02-Apr-2013 Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the product

Product Code HBM01

Product Description: ASULOX

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 United Phosphorus Ltd

The Centre Birchwood Park Warrington WA3 6YN Cheshire, 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 Direct (UK): +44 0845 46 47

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

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

Symbol(s) Xi - Irritant

N - Dangerous for the environment

R-code(s) R43 N;R50

For the full text of the R phrases 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)

Xi - Irritant

N - Dangerous for the environment

R -phrase(s)

R43 - May cause sensitization by skin contact

R50 - Very toxic to aquatic organisms

S -phrase(s)

S24 - Avoid contact with skin

S37 - Wear suitable gloves

S57 - Use appropriate container to avoid environmental contamination

S60 - This material and its container must be disposed of as hazardous waste

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. |
|---------------|-----------|-----------|----------|--------------------------------|---|----------------------|
| Asulam sodium | 218-953-8 | 2302-17-2 | 40 - 50 | Xi;R43 | Skin Sens. 1 (H317) | 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 In case of eye contact, remove contact lens and rinse immediately with plenty of water, also

under the eyelids, for at least 15 minutes If symptoms persist, call a physician

Skin Contact Wash off immediately with soap and plenty of water

If symptoms persist, call a physician

Ingestion Call a POISON CENTER or doctor/physician if exposed or you feel unwell

Inhalation Move to fresh air

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 Carbon dioxide (CO2)

Dry powder Foam Water spray

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Special hazard Burning produces obnoxious and toxic fumes.

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 Avoid contact with the skin and the eyes

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

Ensure adequate ventilation

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.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place Keep away from food, drink and animal feeding stuffs

Store away from frost

Keep away from direct sunlight

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

http://www.ser.nl/nl/taken/adviserende/grenswaarden.aspx

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available.

(PNEC)

8.2 Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye Protection Safety glasses with side-shields.

Skin ProtectionLong sleeved clothing.Hand ProtectionProtective 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 Yellowish

Physical State
Odor
Liquid Soluble concentrate
No information available

Property Values Remarks/ Method

pH 7 - 8

Melting point/freezing point No information available

Boiling Point/Range Not available Flash Point Not required

Evaporation rateNo information available **Flammability (solid, gas)**No information available

Specific Gravity 1.204 g/l

Water Solubility

Solubility in other solvents
Partition coefficient: n-octanol/water No information available
Autoignition Temperature
No information available
No information available
No information available.
No information available

Oxidizing Properties Non oxidizing (according to A17 test)

Explosive Properties According to the chemical structure no explosion reaction is expected.

9.2 Other information

VOC ContentNo 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

Avoid extreme high or low temperatures Exposure to light

10.5 Incompatible materials

No materials to be especially mentioned

10.6 Hazardous decomposition products

No information available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Local effects

Inhalation Not classified.

Eye ContactNo eye irritation. (rabbit). **Skin Contact**No skin irritation. (rabbit).

Ingestion Not classified.

 LD50 Oral
 > 8000 mg/kg (rat)

 LD50 Dermal
 > 2000 mg/kg (rat)

 LC50 Inhalation:
 > 1.7 mg/L

Chronic Toxicity

Skin corrosion/irritationNo information available.

Sensitization Skin: Sensitizing.

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 = 0.19 mg/L (120h) **EC50/48h/daphnia** = 63,4 mg/L **LC50/fish/96** h = > 175 mg/L

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

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.

application specific.

14. TRANSPORT INFORMATION

ADR/RID

14.1. UN-No UN3082

14.2. Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Asulam sodium)

14.3Hazard Class914.4Packing GroupIII14.5Environmental hazardyes

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 (Asulam sodium)

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 (Asulam sodium)

14.3Hazard Class914.4Packing GroupIII14.5Environmental hazardyes14.6Special ProvisionsA97, A158

15. REGULATORY INFORMATION

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

Registration n° MAPP 13175

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

International Inventories

TSCA Complies **EINECS/** Complies **ELINCS** DSL/NDSL Complies Complies **PICCS** Complies **ENCS 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 Commercial Chemical Substances/EU 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

R43 - May cause sensitization by skin contact

R50 - Very toxic to aquatic organisms

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

H317 - May cause an allergic skin reaction

Revision Date 02-Apr-2013

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 responsability 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