

BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

2/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

Inhalation

When inhaled remove to fresh air and seek medical aid.

Skin contact

Wash off with soap and water. If symptoms persist, call a physician.

Eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion

When swallowed accidentally, do not induce vomiting, get medical help. Rinse out mouth and give water in small sips to drink. Ingest activated charcoal.

Notes to Physician

Symptoms

gastro-intestinal irritation

Risks

This product, although being a carbamate, is NOT a cholinesterase inhibitor.

Treatment

Treat symptomatically.

In the event of a mouthful or more being ingested, the following measures should be considered:

Endotracheal intubation should be done and gastric lavage performed, followed by administration of charcoal.

Monitor kidney and respiratory functions.

Elimination by dialysis (forced alkaline diuresis).

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Product itself is non-combustible; fire extinguishing measures to suit surroundings.
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.
Wear full protective suit.

Further information

Cool endangered containers with water spray jet.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear personal protective equipment. Unprotected persons must be kept away.

Environmental Precautions

Do not discharge into the drains/surface water/groundwater.

If spillage enters drains leading to sewage works inform local water company immediately.

If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

3/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

Methods for Cleaning Up

Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material).

Keep in suitable, closed containers for disposal.

Additional Advice

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling

Advice on safe handling

For personal protection see section 8.

Avoid subsoil penetration.

Advice on protection against fire and explosion

No special precautions required.

Storage

Requirements for storage areas and containers

Store in original container.

Protect against frost.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Storage stability

Storage period 24 Months

Storage temperature 25 °C

Other data Stable under recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
Diethylene glycol	111-46-6	101 mg/m ³ / 23 ppm (TWA)	2005	EH40 WEL

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Respiratory Protection

No personal respiratory protective equipment normally required.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or

BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

4/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

	local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand Protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.
Eye protection	Wear goggles conforming to EN166 (Field of Use 5 or equivalent).
Skin and body protection	Wear standard coverall and Type 6 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Hygiene measures	Keep away from food, drink and animal feedingstuffs. Avoid contact with the skin and the eyes. Remove soaked protective clothing immediately. After worktime and during work intervals the affected skin areas must be thoroughly cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Colour	light brown
Odour	acid-like

Safety data

pH	5.6 at 10 g/l (20 °C)
Boiling point/ range	ca. 100 °C
Flash Point	> 100 °C No flash point - Determination conducted up to the boiling point.
Density	ca. 1.124 g/cm ³ at 20 °C
Water Solubility	dispersible
Viscosity, dynamic	184 mPa.s at 20 °C Shearstress of 100/sec
Viscosity, dynamic	384 mPa.s at 20 °C Shearstress of 20/sec
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive

BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

5/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

10. STABILITY AND REACTIVITY

Conditions to Avoid	Extremes of temperature and direct sunlight.
Materials to avoid	None.
Hazardous Decomposition Products	No hazardous decomposition products known.
Thermal decomposition	> 275 °C , Heating rate: 10 K/min No decomposition if used as directed.
Hazardous Reactions	No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 (rat) > 2,000 mg/kg
Acute Inhalation Toxicity	LC50 (rat) > 3.04 mg/l Exposure time: 4 h Highest attainable concentration.
Acute Dermal Toxicity	LD50 (rat) > 4,000 mg/kg
Skin Irritation	Slight irritant effect - does not require labelling. (rabbit)
Eye Irritation	Slight irritant effect - does not require labelling. (rabbit)
Sensitization	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability	Not readily degradable.
Bioaccumulation	Bluegill sunfish Bioconcentration factor (BCF): 165 The value mentioned relates to the active ingredient phenmedipham.
Bioaccumulation	Bluegill sunfish Bioconcentration factor (BCF): 144 The value mentioned relates to the active ingredient ethofumesate.

Ecotoxicity effects

Toxicity to Fish	LC50 (Rainbow trout (Oncorhynchus mykiss)) 19.8 mg/l Exposure time: 96 h
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BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

6/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

Toxicity to daphnia	EC50 (Water flea (Daphnia magna)) 104.5 mg/l Exposure time: 48 h
Toxicity to algae	IC50 (Scenedesmus subspicatus) 3.6 mg/l Exposure time: 72 h
Toxicity to algae	IC50 (Scenedesmus subspicatus) 15.8 mg/l Growth rate Exposure time: 72 h

13. DISPOSAL CONSIDERATIONS

Product

In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.
Advice may be obtained from the local waste regulation authority (part of the Environment Agency in the UK).

Contaminated packaging

Small containers (< 10 l or < 10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times.
Add washings to sprayer at time of filling.
Dispose of empty and cleaned packaging safely.
Large containers (> 25 l or > 25 kg) should not be rinsed or re-used for any other purpose.
Return large containers to supplier.
Follow advice on product label and/or leaflet.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No	3082
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENMEDIPHAM, ETHOFUMESATE SOLUTION)

IMDG

UN-No	3082
Class	9
Packaging group	III
EmS	F-A , S-F
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENMEDIPHAM, ETHOFUMESATE SOLUTION)

IATA

UN-No	3082
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BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

7/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

Class	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENMEDIPHAM, ETHOFUMESATE SOLUTION)

UK 'Carriage' Regulations

UN-No	3082
Labels	9
Packaging group	III
Hazard no.	90
Emergency action code	3Z
Description of the goods	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHENMEDIPHAM, ETHOFUMESATE SOLUTION)

15. REGULATORY INFORMATION

This product has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002: CHIP 3 and any subsequent amendments.

Classification:

Hazard warning labelling compulsory

Hazardous components which must be listed on the label:

- Phenmedipham
- Ethofumesate

R-phrases(s)

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S35 This material and its container must be disposed of in a safe way.

Exceptional labelling

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

Further information

WHO-classification: III (Slightly hazardous)

16. OTHER INFORMATION

Further information

Text of R phrases mentioned in Section 2:

R22	Harmful if swallowed.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The above information is intended to give general health and safety guidance on the storage and transport of the product.

BETOSIP COMBI FL SC390 4X5L BOT GB

Version 2 / GB
102000000774

8/8
Revision Date: 12.05.2006
Print Date: 29.01.2007

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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