

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

Name of product	Duo Tab (Comp.2 Bayroplus Tab) Rez.-Nr. 414109
Manufacturer/distributor	BioLab UK Unit 4, Andoversford Ind. Est., Andoversford, Cheltenham, Glos. GL54 4LB Phone 01242820969
Emergency advice	National Poisons Information Centre, Birmingham Centre, City Hospital, Birmingham B18 7QH Phone (+44) 121 507 4123

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Algicide for treatment of pool water. Contains: polyquats

Hazardous ingredients

CAS-No.	EC-No.	Name	Concentration	Classification
16828-12-9	233-135-0	Aluminiumsulfat 14-Hydrat	< 20	Xi R41
25988-97-0		Polyquaternary ammonium compounds	< 25	N R50/53

3. HAZARDS IDENTIFICATION

R-phrases

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

General information

Remove contaminated soaked clothing immediately.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

In case of eye contact

In case of contact with eyes rinse thoroughly with water.
Refer to medical treatment.

In case of ingestion

If swallowed by mistake drink plenty of water and seek medical treatment.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

water
Foam
Dry fire-extinguishing substance
Carbon dioxide
sand

Special protective equipment for fire-fighters

Wear full protective clothing.



Additional information

Cool endangered containers with water spray jet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions such as

Use personal protective clothing.

High risk of slipping due to leakage/spillage of product.

Environmental precautions such as

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds etc.

Methods for cleaning up such as

Take up with absorbent material.

Flush away residues with water.

7. HANDLING AND STORAGE

Advice on safe handling

No special measures necessary if used correctly.

Advice on protection against fire and explosion

The product is not combustible.

No special measures necessary.

Requirements for storage rooms and vessels

Keep only in original container.

Advice on storage compatibility

Do not store together with animal feedstuffs.

Do not store together with food.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hand protection

chemical-resistant gloves

Suitable materials (recommended: protection index 6, >480 minutes permeation time according to EN 374)

Nitrile-butadiene rubber (NBR) - 0.4 mm layer thickness

Butyl rubber (butyl) - 0.7mm layer thickness

In view of the many different types, the manufacturers' directions for use must be followed

Eye protection

safety goggles

General protective measures

Avoid contact with the eyes.

Hygiene measures

Do not eat or drink when working.

Wash hands before breaks and after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

tablet

Colour

blue

Odour

characteristic

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
pH value in delivery state	ca. 7	20 °C	10 g/l	potentiometric	
Solubility in water					multimiscible

10. STABILITY AND REACTIVITY**Materials to avoid**

Reactions with strong oxidising agents.

11. TOXICOLOGICAL INFORMATION**Acute toxicity/Irritability/Sensitization**

	Value/Validation	Species	Method	Remark
LD 50 acute oral	> 5000 mg/kg	rat		
Irritability eye	low irritant			

! 12. ECOLOGICAL INFORMATION**Data on elimination (persistence and degradability)**

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	The product can be largely eliminated from the water by abiotic processes, e.g. adsorption to activated sludge.			

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 3,8 mg/l (96 h)	Brachidanio rerio	OECD 203	
Daphnia	EC50 1,2 mg/l (48 h)	Daphnia magna	OECD 202	
Algae	EC50 1,5 g/m ³ (72 h)	Scenedesmus subspicatus	OECD 201	
Bacteria	EC50 13,8 mg/l (18 h)	Pseudomonas putida	OECD 209	

Behaviour in sewage plant

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

! General regulation

Product is not allowed to discharge into the ground water or aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste code No.	Name of waste
07 06 99	wastes not otherwise specified

Recommendations for the product

In accordance with regulations for special waste, must be taken to a special waste disposal.

Recommendations for packaging

Uncontaminated packaging may be taken for recycling.

Recommended cleansing agent

Water

14. TRANSPORT INFORMATION

Land and inland navigation transport (ADR/RID/GGVS/GGVE/ADNR)

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyquaternary ammonium compounds), 9, III

Marine transport IMDG/GGV See

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Polyquaternary ammonium compounds), 9, III

Air transport ICAO/IATA

UN 3077 Environmentally hazardous substance, solid, n.o.s. (Polyquaternary ammonium compounds), 9, III

Transport/further informations

Regulations concerning free quantities are to be observed.

LQ 27 (6 kg)

15. REGULATORY INFORMATION

Remarks for classification

The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

Classification

N Dangerous for the environment

R-phrases

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

2 Keep out of the reach of children.

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

28 After contact with skin, wash immediately with plenty of water.

29/56 Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

16. OTHER INFORMATION

Sources of key data used

Results of own researches and examinations

Literature informations

Toxicity studies, NIOSH-Tox-Data

National legislation and regulation

Wording of the R-phrases specified in chapter 2 (not the classification of the formulation!)

R 41 Risk of serious damage to eyes.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.