

MATERIAL SAFETY DATA SHEET OF

MANDIPROPAMID 250 G/L SC

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai R.P. China

Tel: + 86 21 63065878

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Product name: Mandipropamid 250 g/L SC

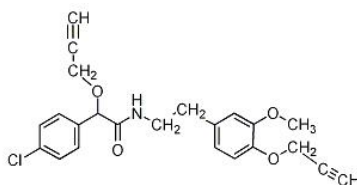
2. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Suspension concentrate (SC)

Active Ingredients: Mandipropamid

IUPAC name (RS)-2-(4-chlorophenyl)-N-[3-methoxy-4-(prop-2-ynyloxy)phenethyl]-2-(prop-2-ynyloxy)acetamide

Structural Formula:



CHEMICAL NAME	CAS NO.	PERCENT
Mandipropamid	374726 - 62 - 2	250g/l
others	not available	Up to 1L

3. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 2

H411: Toxic to aquatic life with long lasting effects.

Label elements

Labelling (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 2

H411: toxic to aquatic life with long lasting effects.

Hazard pictograms:



Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements: H401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements : P391 Collect spillage.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

4. FIRST AID MEASURES

General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.

In case of skin contact : Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

If swallowed: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Indication of any immediate medical attention and special treatment needed

Treatment : There is no specific antidote available. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam or Water spray

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture

Specific hazards during firefighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health.

Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

6. ACCIDENT RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling : No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke.

For personal protection see section 8.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

Specific end use(s)

Specific use(s) : For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering measures**

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin and body protection : No special protective equipment required.

Select skin and body protection based on the physical job requirements.

Respiratory protection : No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white to brownish liquid

Odour: Characteristic

Solubility in water: suspension in water

pH: 5.0-9.0

Explosion properties : Not explosive.

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

No decomposition if used as directed

Incompatible materials

None known

Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapours

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral Acute oral LD50 for rats >5000 mg/kg.

Skin and eye Acute percutaneous LD50 for rats >5050 mg/kg.

Inhalation LC50 for rats >5000 mg/m³.

Not irritant to skin and eye (rabbits).

No potential for sensitisation (guinea pigs).

Chronic toxicity: NOEL (1 y) NOAEL for dogs 5 mg/kg b.w. daily. Chronic NOAEL in rats 15 mg/kg b.w. daily.

Carcinogenicity: Not carcinogenic in the rat or the mouse.

12. ECOLOGICAL INFORMATION

The following information is for the Chlorpyrifos active ingredient:

Birds Acute oral LD50 for bobwhite quail >2250 mg/kg.

Fish LC50 (96 h) for rainbow trout >2.9 mg/l.

Daphnia LC50 (48 h) 7.1 mg/l.

Algae EC50 (96 h) for *Pseudokirchneriella subcapitata* >2.5 mg/l.

Other aquatic spp. EC50 (96 h) for eastern oysters 0.97 mg/l; (7 d) for *Lemna gibba* >6.8 mg/l.



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Bees LD50 (contact and oral) >200 μ g/bee.

Worms LC50 >1000 mg/kg.

Other beneficial spp. Very low risk for beneficial arthropods.

Enviromental fate

Aqueous photolysis DT₅₀ 1.7 d (pH 7, 25 °C). Mean soil DT₅₀ (field) 17 d (range 2 - 29). Mean Koc 847 ml/g (range 405 - 1294). Soil degradation DT₅₀ (lab., 20 °C, aerobic) 53 d; anaerobic degradation appears to be slower. Field dissipation DT₅₀ 20 d.

13. DISPOSAL CONSIDERATION

Product : Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

UN Number: 3082

UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MANDIPROPAMID)

Transport hazard class: 9

Packing group: III

15. REGULATORY INFORMATION

Follow local and international laws and regulations.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.



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If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

--END OF MSDS--