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Product code :	SBM 07/024	Company : SBM DEVELOPPEMENT SAS	

SAFETY DATA SHEET

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

1.1. Product identifier

Name : BELEM 0,8 MG
Product code: SBM 07/024
GR

1.2. Relevant identified uses of the substance or mixture and uses advised against

Insecticide

1.3. Details of the supplier of the safety data sheet

Registered company name: SBM DEVELOPPEMENT SAS.
Address: 160, route de la Valentine – CS 70052 - 13374 MARSEILLE CEDEX 11 - FRANCE.
Telephone: +33467355050. Fax: +33467355035. E-mail : contact.cmpa@sbm-dev.com

1.4. Emergency telephone number

+33 (0)1 45 42 59 59 (INRS / ORFILA - www.centres-antipoison.net)
+33 (0)3 83 32 36 36 (www.centres-antipoison.net)
(24h/24 7d/7).

2 – HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification following regulation (EC) N° 1272/2008 [UE-GHS/CLP]

- Aquatic Acute 1 - H400: Very toxic to aquatic life.
- Aquatic Chronic 1 - H410: Very toxic to aquatic life with long lasting effects.

2.1.2. Classification following regulation N°1999/45/CE

Physical:

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For health:

/

For environment:

N - Dangerous for the environment.

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

2.2. Label elements

Labelling following regulation CE N° 1272/2008 [UE-GHS/CLP]

Hazard pictogram:




Signal word: WARNING

Hazard statements:

H410: Very toxic to aquatic life with long lasting effects.

Precautionary:

- P102: Keep out of reach of children.
- P405: Store locked up.
- P270: Do not eat, drink or smoke when using this product.
- P262 : Do not get in eyes, on skin, or on clothing.
- P280 : Wear protective gloves and protective clothing.
- P273: Avoid release to the environment.
- P391 : Collect spillage.

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P501 : Dispose of contents/container as hazardous waste.

Special provisions:

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

SP1: Do not contaminate water with the product or its container [Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads].

SPe3: To protect aquatic organisms respect an unsprayed buffer zone of 5 m to non-agricultural surface water bodies.

Spe5: To protect birds/wild mammals the product must be entirely incorporated in the soil. Ensure that the product is also fully incorporated at the end of rows.

2.3. Other hazards

/

3 - COMPOSITION/INFORMATION ON INGREDIENTS

Full text of risk phrases appearing in section 3: see section 16.

3.1. Substances

Substances representing a hazard:

Chemical name	N° CAS N° CE N° INDEX	REACH Registration n°	Classification according to Directive 67 / 548 / EEC	Classification according to Regulation (EC) No. 1272/2008		Content %w/w
CYPERMETHRIN CIS/TRANS +/-40/60	52315-07-8 257-842-9 607-421-00-4	Not relevant	Xn, R20/22 ; Xi, R37 ; N, R50-53	Acute Tox. 4 Acute Tox. 4 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1	H332 H302 H335 H400 H410	0,75 ≤ x % ≤ 1

3.2. Mixtures

/

4 - FIRST AID MEASURES

4.1. Description of first aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of exposure by inhalation:

If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not give the patient anything orally.

In the event of splashes or contact with eyes:

Wash abundantly with fresh water and clean during 15 minutes by maintaining the eyelids isolated.

Address the patient in an ophthalmologist, in particular if it appears a redness, a pain or a visual embarrassment.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital

In the event of swallowing:

In the event of swallowing, if the quantity is not very important, (not more than one mouthful), to rinse the mouth with water and to consult a doctor


In the event of accidental ingestion to call a doctor to judge appropriateness of a monitoring and a secondary treatment in hospital medium, if need be. To show the label.

4.2. Most important symptoms and effects, both acute and delayed

Systemic symptoms : Excitement, Gastrointestinal discomfort, Tremor, Dizziness, Headache, listlessness, nausea and vomiting, epigastric pain, muscular fasciculation of limbs.

Risks : This product/preparation contains a pyrethroid. Must NOT be confused with organophosphorus compounds.

Risk of entering the lungs on vomiting after ingestion.

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4.3. Indication of any immediate medical attention and special treatment needed

Local treatment: Initial treatment should be symptomatic and supportive. After eye contact: instillation of local anaesthetics drops e.g. 1%. Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.

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

5 - FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

In the event of fire, use specifically adapted means of extinction : foams, carbon dioxide, powder, water spray or fine droplets.

Extinguishing media which must not be used for safety reasons:

Water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

Nitrogen and carbon oxides

5.3. Advice for firefighters

Special protective equipment for fire-fighters:

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid any contact with the skin and eyes.

Consult the safety measures listed under headings 7 and 8.

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

6.3. Methods and material for containment and cleaning up

Brush and recover the product.

6.4. Reference to other sections

/

7 - HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

Fire prevention:

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal safety, see §8.


Observe precautions stated on label and also industrial safety regulations

Avoid contact of product with the skin and eyes

Prohibited equipment and procedures:

Smoking, eating and drinking are prohibited in premises where the preparation is used

Never open the packages under pressure

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Storage:

Keep the container tightly closed in a dry, well-ventilated place

7.3. Specific end use(s)

/

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Use personal protection equipment as per Directive 89/686/EEC.

8.1. Control parameters

Do not contain any substance with occupational exposure limit values.

8.2. Exposure controls

Technical measures:

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Respiratory protection:

Use dust protection mask conforming EN 140.

Hand protection:

Use nitrile protection gloves conforming EN 374-3.

Eye and face protection:

Use eye protectors designed with side shields conforming EN 166.

Skin protection:

For further information, see § 11 of S.D.S. - Toxicological information.

Environmental exposure controls:

/


9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State:	Granules
Color:	Pink
Odor:	No data available
Odor threshold:	No data available
Density (20 ° C):	1.3 – 1.6 g/cm ³
pH 1%:	7.0 – 8.0
Solidification temperature:	not available
Boiling point / range:	not available
Flash point (°C):	not applicable
Evaporation rate:	not available
Flammability (solid, gas):	not flammable
Upper Explosive Limit:	not available
Lower Explosive Limit:	not available
Vapour pressure:	not available
Solubility in water:	not available
N-octanol/water partition coefficient:	not available
Auto-ignition temperature:	> 400 ° C
Decomposition Temperature:	not available
Kinematic viscosity (40 ° C):	not applicable
Explosive properties:	not explosive
Oxidizing properties:	not oxidizing

9.2. Other information

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10 - STABILITY AND REACTIVITY

Stable under normal operating conditions

10.1. Reactivity

/

10.2. Chemical stability

/

10.3. Possibility of hazardous reactions

/

10.4. Conditions to avoid

High temperatures

10.5. Incompatible materials

/

10.6. Hazardous decomposition products

Nitrogen and carbon oxides

11 - TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

In the event of exposure by inhalation:

- Cypermethrin:
Acute toxicity : inhalation DL 50 rat : 3,28 mg/l
Irritating to respiratory system
Harmful by inhalation
- BELEM 0.8 MG:
Acute toxicity: inhalation DL 50 rat not required, non dusting granule.

In the event of swallowing:

- Cypermethrin :
Acute toxicity : oral DL 50 rat : 287 mg/Kg
Harmful if swallowed
- BELEM 0.8 MG:
Acute toxicity : oral DL 50 rat > 2000 mg/Kg bw

In the event of splashes or contact with skin:

- Cypermethrin:
acute toxicity : dermal DL 50 rat : > 2000 mg/Kg
Skin irritation: non irritant
Skin sensitization: not sensitizing (M&K)
- BELEM 0.8 MG:
Acute toxicity: dermal DL 50 rat : > 2000 mg/Kg
Skin irritation: non irritant
Skin sensitization: the active substance and the coformulants are not sensitisers so it is assumed the formulation is not.

In the event of splashes or contact with eyes:


- Cypermethrin:
Eye irritation: non irritant
- BELEM 0.8 MG:
Eye irritation: non irritant

Carcinogenicity:

Studies conducted with cypermethrin showed no carcinogenic effects.

Mutagenicity:

- Cypermethrin:
- Germ cell mutagenicity: the studies showed no mutagenic effects.

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Reproductive Toxicity:

- Cypermethrin:
Studies conducted on cypermethrin showed no effects on reproduction.

Developmental Toxicity:

- Cypermethrin:
Reduced litter size and pup weight at doses toxic to the mother.

Specific target organ toxicity / single exposure:

/

Specific target organ toxicity / Repeated Exposure:

/

Other data:

- Cypermethrin:
- Toxicokinetics, metabolism and distribution:

Orally cypermethrin is significantly absorbed (50% in 24 hours), and distributed throughout the body, mainly in the skin and fat, before being metabolized (50% hydrolysed in acid and non-active alcohol derivatives). It is almost completely eliminated (> 90%) in 72 hours by the urine and faeces.

12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects.

The product must not be allowed to run into drains or waterways.

The following data correspond to the data of the active substance cypermethrin, the data for the mixture are not available.

12.1. Toxicity

- **Data on CYPERMETHRIN, CAS N°52315-07-8 :**

Aquatic organisms :

Species	Results	Exposure duration/conditions/Remarks
Fish, <i>Onchorhynchus mykiss</i>	CL50 = 0,0028 mg/L	96h
Daphnies, <i>Daphnia magna</i>	CE50 = 0,0003 mg/L	48h
Algae, <i>Ps. subcapitata</i>	CE50 > 0,1 mg/L	96h

Substance highly toxic to fish and aquatic invertebrates.

Other organisms :

Species	Results	Exposure duration/conditions/Remarks
Birds	DL50 acute > 10000 mg/kg p.c. CL50 dietary > 5620 ppm CSEO(NOEC) reproduction = 1000 ppm	Data not available
Earthworms	CL50 > 100 mg/kg soil Toxicity on reproduction : No effect on the field up to 100 g/ha.	14 days
Bees	DL 50 contact = 0,02 µg/bee DL50 oral = 0,035 µg/bee	24h 24h

Slightly toxic to birds and earthworms; highly toxic to bees.

Rapidly penetrates the insect cuticle and acts by opening the sodium channel.

Inhibitory effects on the activity of micro-organisms:

No adverse effects on the mineralization of carbon and nitrogen from the soil at a dose of 150 g / ha.

12.2 Persistence and degradability


- **Data on CYPERMETHRIN, CAS N°52315-07-8 :**

- Biodegradability :

Not readily biodegradable.

Degraded in the soil within 2 to 15 weeks (DT50) depending on the type of the soil.

Degradation is also faster under aerobic conditions.

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- **Abiotic degradation :**

Stable in acidic medium (half-life \geq 1000 days at pH 3), hydrolysis in alkaline medium (half-life \leq 0.5h at pH11). Pure substance is stable to light, but degraded by photolysis in water (DT50 <15 days) and in the air (DT50 = 3.5h).

- **Wastewater treatment:**

Respiration inhibition of activated sludge: CL50 = 163 mg/L

12.3. Bioaccumulative potential

- **Data on CYPERMETHRIN, CAS N°52315-07-8 :**
log Kow = 5.3-5.6.
FBC = 1204 High potential to accumulate in fat.

12.4. Mobility in soil

- **Data on CYPERMETHRIN, CAS N°52315-07-8 :**
Known or predicted distribution between environmental compartments: Strongly adsorbed on soil, sediment and suspended particles.

Surface tension: (no data)

Adsorption / Desorption: Koc = 5800 - 160000. Not mobile in all types of soil, the substance remains fixed in the top 15 cm (field studies).

Volatility: PV = $2.3 \cdot 10^{-7}$ Pa à 20°C; substance is not considered VOC.
H = 0.024 Pa.m³/mol; low potential for volatilization.

12.5. Results of PBT and vPvB assessment

Data on CYPERMETHRIN, CAS N°52315-07-8 :
This product is not a PBT or vPvB, or does not contain.

12.6. Other adverse effects

Data not available.

13 - DISPOSAL CONSIDERATIONS

13.1. Product

To dispose of unusable products, contact a company approved to collect and dispose of hazardous products. The product must be incinerated in an installation approved by the appropriate authorities. Avoid the product running into drains or water courses.

13.2. Packaging

The packaging must not be re-used: after using the product, ensure it is empty. Keep the label(s) on the container. Dispose of empty packaging through collections organised by a specific collection service. To dispose of unusable products, contact a company approved to collect and dispose of hazardous products.

13.3. Local provisions

France:

The regulation relating to waste is codified in the CODE OF the ENVIRONMENT, according to the Ordinance n°2000-914 of September 18, 2000 relating to the Legislative part of the code of the environment.


Various texts from article L. 541-1 to article L. 541-50 are in the Book V (Prevention of pollution, the risks and the harmful effects), Titre IV (Waste), Chapter I (Waste disposal and recovery of materials).

Waste code according to Decree 2002-540 of 18 April 2002 transposed into the Environmental Code:

- Waste Product code: 070400
- Packaging waste code: 150100

14 - TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO / IATA for air transport (ADR 2013 - IMDG 2014 - ICAO / IATA 2014).

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14.1. UN Number

UN 3077

14.2. Shipping name of UN

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYPERMETHRIN, 0.8%)

14.3. Class of danger for transport

Transport Regulation	ADR/RID/ADNR	IMDG/OMI	IATA/ICAO
N° ONU	3077	3077	3077
Shipping name of UN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (CYPERMETHRIN 0.8%)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (CYPERMETHRIN 0.8%)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (CYPERMETHRIN 0.8%)
Labels	9	9	9
Hazard CLASS	9	9	9
Hazard code	90		
Marin pollutant		Y (Y/N)	
FS		F-A, S-F	

14.4. Packaging Group

III

14.5. Hazardous for the environment

Very toxic to aquatic life with long lasting effects according to regulation CE N° 1272/2008 [UE-GHS/CLP].

14.6. Special precautions for user

/

14.7. Bulk transport in accordance with Annex II of MARPOL 73/78 and the IBC

/

15 - STATUTORY INFORMATION

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

Particular dispositions:

Nomenclature of classified installations (France): No. 1171 and 1172

1171: Industrial manufacture of substances or preparations dangerous for the environment- A and/or B.

1172: Storage and use of substances or preparations dangerous for the environment, very toxic - A -

15.2. Chemical safety assessment

/

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

Full text of risk phrases appearing in section 3:

R 20/22 Harmful by inhalation and if swallowed.


R 37 Irritating to respiratory system.

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

Acute Tox. 4: Acute toxicity (category 4)

STOT SE 3: Specific Target Organ Toxicant— single exposure (category 3)

Aquatic Acute 1: Aquatic acute (category 1)

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Aquatic Chronic 1: Aquatic chronic (category 1)

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Modification(s) of Version 4:

- §1
- §2
- §11
- §12
- §13
- §15