SAFETY DATA SHEET
Compilation date: september 2013, revision 6.0

1. PREPARATION AND COMPANY IDENTIFICATION

1.1 – Product identifier

Commercial name: **FLUBEX® COMPRESSE (TABLETS)**

Health Ministry Registration #17520

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

Insecticide effervescent tablets for localized control on sources of chironomids and mosquitoes larvae and pupas for domestic, civil and industrial use

1.3 – Details of the supplier of the safety data sheet

**BLEU LINE S.r.l.**
Via Virgilio, 28 – Z.I. Villanova 47122 - Forlì (FC) Tel (+39) 0543.754430 Fax (+39) 0543.754162

Responsible technician for the SDS compilation: bleuline@bleuline.it

1.4 – Emergency telephone number

In case you feel unwell contact a poisoning centre. **POISON CENTRE OSPEDALE NIGUARD A (MI) (+39) 02 66101029**

2. HAZARDS IDENTIFICATION

2.1 – Classification of the substance or mixture

The product is classified as hazardous in compliance with the provisions of the directive 67/548EEC and 1999/45EC and/or of the (EC) Regulation 1272/2008 (CLP) (and further amendments thereof). Hence, a safety data sheet is needed for this product, as provided for by the (EC) Regulation 1907/2006 and further amendments thereof. Additional information on hazard for the health and/or the environment can be found in sections 11 and 12 of this sheet.

HAZARD SYMBOLS : N, dangerous for the environment;
R-PHRASES: 50/53

The complete text of the R-phrases can be found in section 16 of the sheet.

2.2 – Label elements

Hazard labeling of the mixture in compliance with the provisions of the directive 67/548 EEC and 1999/45 EC and further amendments thereof.

Hazard symbols:

- **N** Dangerous for the environment

Risk phrases (R):

50/53 – Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment

Safety advice (S):

2 – Keep out of the reach of children

13 – Keep away from food, drink and animal feeding stuffs

20/21 – When using do not eat, drink or smoke

29/35 – Do not empty into drains; dispose of this material and its container in a safe way

46 – If swallowed, seek medical advice immediately and show this container or label

61 - Do not release in the environment. Refer to special instructions/safety data sheet

2.3 – Other hazards

No information available
3. COMPOSITION/INFORMATION ON THE INGREDIENTS

3.1 Substances
Not applicable information

3.2 Mixtures
Chemical description: Insecticide and co-formulants in mixture.

It contains:

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CONC.</th>
<th>CLASSIFICATION 67/548/CEE</th>
<th>CLASSIFICATION 1272/2008 (CLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIFLUBENZURON</td>
<td>2%</td>
<td>N; R50/53</td>
<td>Aquatic Acute 1 H400 Aquatic Chronic 1 H410</td>
</tr>
<tr>
<td>CAS 35367-38-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EINECS 252-529-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU INDEX // Reg n°: not subject</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITRIC ACID ANHYDROUS</td>
<td>5-8%</td>
<td>Xi; R36</td>
<td>Eye Irrit. 2 H319</td>
</tr>
<tr>
<td>CAS 77-92-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EINECS 201-069-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU INDEX // Reg n°: not subject</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

T+= Very toxic (T+), T=Toxic (T), Xn=harmful (Xn), C=Corrosive (C), Xi=Irritant (Xi), O=Combustive (O), E=Explosive (E), F+=Extremely Flammable (F+), F=Easily Flammable (F), N=Dangerous for the environment (N).

The complete text of the (R) Risk and (H) hazard-phrases can be found in section 16 of the sheet.

4. FIRST AID MEASURES

4.1 Description of first aid measures
General measures: In case of doubt or of symptom persistence, consult a physician, supplying all label and safety data sheet information. In case of accident, first aid must be given by trained staff in order to avoid any further complication to the injured person.

Contact with eyes: Wash with plenty of water, running water if possible, for 10' at least, keeping the eyelids open. Then protect the eyes with dry sterile gauze or a dry and clean handkerchief. ASK FOR MEDICAL ADVICE. Do not use any kind of eyewash or ointment until an oculist has visited you or given you advice.

Contact with skin: Take contaminated clothes off. Wash with plenty of soap and running water those body parts that have been or that are likely to have been in contact with the preparation.

Inhalation: Take outdoors and let rest. In case the person continues to feel unwell, seek medical advice.

Ingestion: Seek medical advice immediately and show the physician this safety data sheet. Do not induce vomit in order to prevent the risk of inhalation through the respiratory tract.

4.2 Main acute and delayed symptoms and effects
For the symptoms and effects caused by the substances see chapter 11.

4.3 Indication to consult a physician immediately or to have special treatments
Symptomatic treatment and vital functions check.

5. FIRE PRECAUTIONS

5.1 Fire extinguishing means
Suitable fire extinguishing means: Dry powder, CO₂, nebulized water, foam.
Extinguishing means to be avoided: Full water stream. Water is not effective to extinguish the fire, but it can be used to cool the closed containers that are exposed to the fire, in order to prevent bursts and explosions.
5.2 Special hazards caused by the substance or by the mixture

Particular hazards in case of fire: Poisoning gas and irritating vapor emission, in case of fire. Excessive pressure may form in containers that are exposed to the fire that may cause explosions.

5.3 Recommendations for the persons in charge of fire-extinguishing

Safety equipment: Wear a suitable breathing apparatus - especially in closed rooms - and complete protection clothing.

Special procedures: Control propagation. Stay windward. Do not breath smokes. Use water mist to cool the fire exposed containers down. Prevent the fire-extinguishing water from contaminating the environment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective devices, and emergency procedures

Use suitable individual protection means (sect. 8) Do not smoke or use flames.

6.2 Environmental precautions

Store the product far from drains, rivers or seawater in order to prevent environmental pollution. If necessary, report to the responsible authority.

6.3 Containing and clearing methods and materials

In case the product is spread on the ground, collect the product with a broom and a shovel taking care that no powder is lifted. Deposit the collected material in the special disposal containers (see section 13).

6.4 Reference to other sections

Informations about the individual protection and the disposal are reported in the sections 8 and 13.

7. HANDLING AND STORAGE

7.1 Safe handling precautions

Do not eat, drink or smoke. Wear suitable protection clothing (see 8). After handling the product, wash with water and soap: ensure a good ventilation in the workplace.

7.2 Safe storage conditions, including any incompatibility

Store into the closed original packages, far from food and drinks, and out of children or pets' reach. If possible, store at a temperature between 5°C and 30°C.

7.3 Special final use

No available information.

8. EXPOSURE CONTROL/INDIVIDUAL PROTECTION

8.1 Control parameters

In working environments, no professional exposure limits and/or biologic limits are reported for any of the preparation components. For further details see section 16 (remarks). In case of professional exposure to the preparation, wear the individual protection devices listed below.

8.2 Exposure control

General precautions: Use the preparation according to the indications of this sheet. Use the individual protection devices indicated in this sheet.

Breathing protection: In poorly ventilated rooms, where high concentrations of the preparation dust are likely, protect the respiratory tract suitably (A-type mask with filter).

Hand protection: Wear water and chemicals-proof gloves (EN 374).

Eye protection: Wear protective goggles with lateral protection in case of possible contact with the eyes. Make sure eyewashes or eye showers are available in case of emergency.

Skin protection: Wear protective coats.
9. CHEMICAL AND PHYSICAL PROPERTIES

9.1 Information on the main chemical and physical properties

Aspect: white tablets
Odour: odourless
pH: 6-7
Specific weight: 0.92 at 20°C (Kg/litre)
Flash point: not flammable
Explosive properties: not explosive
Oxidizing properties: not oxidizing
Water solubility: tablets are soluble in water

9.2 Further information
No available information

10. STABILITY AND REACTIVITY

10.1 Reactivity
Under normal use conditions there is no special reaction hazard with other substances.

10.2 Chemical stability
The product is stable under normal handling and storing conditions.

10.3 Possible dangerous reactions
None.

10.4 Conditions to be avoided
Avoid overheating, electrostatic discharge and all sources of ignition.

10.5 Incompatible materials
No available information.

10.6 Decomposition products
The thermal decomposition causes the formation of dangerous compounds.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

A.p. action: The Diflubenzuron is an anti-juvenile hormone synthetic, growth inhibitor of many insects, especially of the order Diptera. It has a low acute toxicity by any route of exposure. It is no irritating to skin, no sensitizing to skin and it has not chronic effects on human health.

Inhalation: In case of extended exposures, irritation of the respiratory tract, headache, nausea, dizziness and drowsiness.

Ingestion: If swallowed the product can cause irritation to the digestive mucosa, hypersialosis, nausea, vomit, diarrhoea, abdominal pain, depression of the central nervous system, muscular spasms, convulsions, dyspnea; if swallowed the liquid can cause the formation of drops that, once in the lungs, can cause chemical pneumonia.

Contact with skin: In case of frequent and extended contact, persistent irritation and dermatitis, chapping and dryness of the skin.

Contact with eyes: Rash and persistent conjunctiva irritation.

Toxicological data: Active principles: Diflubenzuron: LD50 (Oral): > 4640 mg/kg rat; LD50 (Dermal): > 10000 mg/kg rat; LC50 (Inhalation): > 2,49 mg/l rat. Eye irritation and sensitization tests are negative.
12. ECOLOGICAL INFORMATION

The preparation is very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

12.1 Toxicity

Active principles: Diflubenzuron: LC50 (96h): 250 mg/l Onchorhynchus mykiss; EC50 (48h): 0,00442 mg/l Daphnia magna.

12.2 Persistence and biodegradability

No available information

12.3 Bioaccumulation potential

No available information

12.4 Soil mobility

No available information

12.5 PBT and vPvB assessment result

No available information

12.6 Other adverse effects

No available information

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment method

General considerations: Recover, if possible. Comply with the local and national regulations. Containers shall not be disposed of in the environment, even if empty. If they contain residuals, they must be classified, stored and sent to a suitable treatment facility. In case of non-professional use, the empty container can be disposed of as domestic waste.

Classification: The waste classification represents a manufacturer’s obligation. Possible EWC codes: 07 04 13 (solid wastes containing dangerous substances), 16 03 05 (organic wastes containing dangerous substances).

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>ADR/RID (road transport)</th>
<th>Class 9, UN# 3077, Packing Group III, environmentally dangerous material, solid. N.A.S. (Diflubenzuron)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG (sea transport)</td>
<td>Class 9, UN# 3077, Packing Group III, environmentally dangerous material, solid. N.A.S. (Diflubenzuron)</td>
</tr>
<tr>
<td></td>
<td>The preparation is classified as sea pollutant.</td>
</tr>
<tr>
<td>ICAO/IATA (air transport)</td>
<td>Class 9, UN# 3077, Packing Group III, environmentally dangerous material, solid. N.A.S. (Diflubenzuron)</td>
</tr>
</tbody>
</table>
15. REGULATORY INFORMATION

15.1 Specific health, safety, and environment protective regulations applying to the substance or mixture

Seveso category: 9 i)

Restrictions to the product or to the contained substances in compliance with the Annex XVII of the EC regulation 1907/2006:

Product: Point 3

Candidate List (art.59 REACH) substances: None

Substances subject to authorization (Annex XIV REACH): None

Health controls

15.2 Chemical safety assessment

A chemical safety assessment wasn’t elaborated for the preparation and its components.

16. FURTHER INFORMATION.

General considerations: All information contained in this safety data sheet correspond to our present knowledge and experience on the product, and shall not be considered exhaustive. But for contrary indications, they apply to the product as it is and in compliance with the specifications. Make sure new combinations and mixtures do not originate new dangers. At any rate, it is the user’s responsibility to make sure all information are suitable and complete for the product’s intended use. In no way is the user exonerated from complying with the legal and administrative regulations concerning the product, the health, the workers’ safety, and the environmental protection. For further information on the product, read the label on the product’s package.

Revision #: 6.0.
Compilation date: september 2013.

Text of Hazard phrases (H) of section 2-3 of the sheet:

- Eye Irrit. 2: Eye irritation, category 2
- Aquatic Acute 1: Dangerous for the aquatic environment, acute toxicity, category 1
- Aquatic Chronic 1: Dangerous for the aquatic environment, chronic toxicity, category 1
- H319: Causes serious eye irritation
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects

Text of Risk phrases (R) of section 2-3 of the sheet:

- R36: Irritating to eyes
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Reference regulation: The indications of the following European regulations are complied with:

- 99/45/EC (directive dangerous preparations classification and labeling) as reported in D.Lgs n° 65/2003;
- 67/548/EC directive (dangerous substances classification and labeling);
- EC regulations 1272/2008 of the European Parliament (CLP);
- 98/24/EC directive (workers’ health and safety protection against chemical agents deriving risks) as reported in D.Lgs 81/2008;
- EC 1907/2006 regulation (REACH);
- EC regulations 790/2009 of the European Parliament (I Atp.CLP);
- EC regulations 453/2010 of the European Parliament;
- Database on the substances GESTIS - IFA (Institute für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung).

Remarks (section 8): TLV-TWA (Threshold Limit Value - Time Weighted Average): 8 hour assessed limit values. TLV - STEL (Threshold Limit Value - Short Time Exposure Limit), maximum value allowed for brief exposures.

To the section 8 is cited the ACGIH (American Conference of Governmental Industries Hygienists). The data of the threshold limit values (TLV - TWA) have been extracted from the supplement to the Vol. 3, n° 1, of the Journal of Industrial Hygienist (AIDII), published in 2012, referring to the 2012 ACGIH values.

Changes compared to the previous version
Modified sections: 01 / 02 / 03 / 16.

Further information: This sheet has been written in collaboration with Bioikòs Ambiente S.r.l. - with office in via Rivani 99, BOLOGNA (Tel. 0039051 - 5878211).