

	COLKIM S.r.l.	Revision nr. 4.9
	DEVICE SC 15	Dated 28/02/2018 Page n. 1/10

Safety Data Sheet

SECTION 1. Identification of the substance/mixture and of the company/undertaking.

1.1. Product identifier.

Product name. **DEVICE SC 15**

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

Description/Intended use. **Insecticide in concentrated suspension, for civil use. For the control of mosquito and fly larvae in the breeding grounds.**

1.3. Details of the supplier of the safety data sheet.

Name. **COLKIM S.r.l.**
 Full address. **Via Piemonte, 50**
 District and Country. **40064 OZZANO EMILIA (BO)**
Italia
Tel. 051 / 799445
Fax. 051 / 797555

E-mail address of the competent person. **info@colkim.it**
 Responsible for the Safety Data Sheet.
 Product distribution by: **COLKIM S.r.l. - Via Piemonte, 50 - 40064 OZZANO E. (BO)**

1.4. Emergency telephone number.

For urgent inquiries refer to. **118**

Contact a poison control center:

Poison Control Center	Address	Telephone Number
CAV "Osp. Pediatrico Bambino Gesù"	P.zza Sant'Onofrio, 4 – 00165 Roma (RM)	06 68593726
Az. Osp. Univ. Foggia	V.le Luigi Pinto, 1 – 71122 Foggia (FG)	0881 732326
Az. Osp. "A. Cardarelli"	Via A. Cardarelli, 9 – 80131 Napoli (NA)	081 7472870
CAV Policlinico "Umberto I"	V.le del Policlinico, 155 – 00161 Roma (RM)	06 49978000
CAV Policlinico "A. Gemelli"	Largo Agostino Gemelli, 8 – 00168 Roma (RM)	06 3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica	Largo Brambilla, 3 – 50134 Firenze (FI)	055 7947819
CAV Centro Nazionale di Informazione Tossicologica	Via Salvatore Maugeri, 10 – 27100 Pavia (PV)	0382 24444
Osp. Niguarda Ca' Granda	P.zza Ospedale Maggiore, 3 – 20162 Milano (MI)	02 66101029
Azienda Ospedaliera Papa Giovanni XXII	P.zza OMS, 1 – 24127 Bergamo (BG)	800883300

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

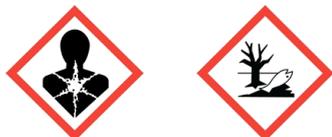
Hazard classification and indication:

Specific target organ toxicity - Repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
EUH208 Contains: 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Supplemental Hazard Statements:

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

Precautionary statements:

P102 Keep out of reach of children.
P260 Do not breathe aerosol.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P401 Keep away from food, drink and animal feedingstuffs.
P501 Dispose of contents/container in accordance with national regulation.

2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification	Conc. %	Classification 1272/2008 (CLP).
DIFLUBENZURON		
CAS. 35367-38-5 CE. 252-529-3 INDEX. - Nr. Reg	13,9	Aquatic Acute 1; H400, Aquatic Chronic 1; H410
Ethane-1,2-diol		
CAS. 107-21-1 CE. 203-473-3 INDEX. - Nr. Reg.	1-10	Acute Tox. 4; H302 STOT RE 2; H373

Sulfurous acid, monosodium salt, reaction products with cresol- formaldehidenonylphenol polymer (average MW 300-600)

CAS. 115535-44-9 1-10 Aquatic Chronic 4; H413
CE. -
INDEX. -
Nr. Reg.

1,2-Benzisothiazol-3(2H)-one

CAS. -2634-33-5 0,005 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400
CE. 220-120-9
INDEX. -
Nr. Reg.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures.**4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorized by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

For symptoms and effects caused by the contained substances, see chap. 11.

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

The procedure of First Aid should be agreed by consulting the competent occupational physician.

SECTION 5. Firefighting measures.**5.1. Extinguishing media.****SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

No information available.

5.3. Advice for firefighters.**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.**6.1. Personal precautions, protective equipment and emergency procedures.**

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.
7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Insecticide.

SECTION 8. Exposure controls/personal protection.

It have not been set official limits of exposure for the product.

8.1. Control parameters.
Occupational Exposure Limits:

Components	CAS-No	Value Type (Form of exposure)	Control Parameters	Basis
ethane-1,2-diol	107-21-1	TWA	20 ppm 52 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	40 ppm 104 mg/m ³	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	20 ppm 52 mg/m ³	IT OEL
Further information	The notation 'Skin' attributes to the exposure limit values and indicates the possibility of absorption through the skin.			
		STEL	40 ppm 104 mg/m ³	IT OEL
Further information	The notation 'Skin' attributes to the exposure limit values and indicates the possibility of absorption through the skin.			

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties.**9.1. Information on basic physical and chemical properties.**

Appearance	Suspension
Colour	Off-white
Odour	Characteristic
Odour threshold.	Not available.
pH.	6-8
Melting point / freezing point.	0° C
Boiling point/ Boiling range	100° C
Flash point.	Not applicable.
Evaporation Rate	Not available.
Flammability of solids and gases	Not applicable
Lower inflammability limit.	Not applicable
Upper inflammability limit.	Not applicable
Lower explosive limit.	Not applicable
Upper explosive limit.	Not applicable
Vapour pressure.	Not relevant.
Vapour density	Not relevant.
Density.	1.1 g/cm ³
Solubility	Dispersible.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not applicable.
Decomposition temperature.	Not applicable.
Viscosity/ Dynamic viscosity	300 - 800 mPa.s (20 °C)
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.**10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid.

Avoid extreme temperatures and direct sunlight.

10.5. Incompatible materials.

Incompatible with: oxidising agents, strong acids, strong bases.

10.6. Hazardous decomposition products.

Information not available.

SECTION 11. Toxicological information.

No episodes of damage to health due to exposure to the product are known. In any case it is recommended to operate in compliance with the rules of good industrial hygiene. The preparation may, in particularly sensitive individuals, cause slight health effects due to inhalation and / or cutaneous absorption and / or contact with the eyes and / or ingestion.

11.1. Information on toxicological effects.**ACUTE TOXICITY.**

LD50 (Oral) > 5,000 mg/kg rat

LC50 (Inhalation) > 5 mg/l/4 h male and female rat

LD50 (Dermal) > 2,000 mg/kg rat

ETHANE-1,2-DIOL:

LD50 (Oral). 4,700 mg/kg female rat

LD50 (Dermal). 10,670 mg/kg rabbit

1,2-BENZISOTHIAZOL-3(2H)-ONE:

Acute toxicity estimate: 500 mg/kg

LC50(Inhalation). 0.5 mg/l 4 h rat

LD50(Dermal). > 2,000 mg/kg rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information.

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

12.1. Toxicity

EC50 - for Crustacea	0.0026 mg a.s./l/48h SPECIE DAPHNIA MAGNA
1,2-BENZISOTHIAZOL-3(2H)-ONE	
LC50 - - for Fish.	1.6 mg/l /96h SPECIES RAINBOW TROUT
EC50 - for Crustacea	2.94 mg/l /48h SPECIES DAPHNIA MAGNA
EC50 - - for Algae / Aquatic Plants.	0.11 mg/l/72h SPECIES SELENASTRUM CAPRICORNUTUM
EC50 -- for Algae / Aquatic Plants..	0.067 mg/l/72 h SPECIES Pseudokirchneriella subcapitata
EC20 – for Bacteria	3.3 mg/l/3h Activated Sludge

12.2. Persistence and degradability

Information not available.

12.3. Bioaccumulative potential.

Partition coefficient: n-octanol/water.	log Pow: -1.3
1,2-BENZISOTHIAZOL-3(2H)-ONE	
Partition coefficient: n-octanol/water..	log Pow: 0.75
BCF.	6.94

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13. Disposal considerations.**13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

The CER codes recommended (which may change according to the use) are:

CER 16.03.05* – Organic waste containing hazardous substances.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

The CER codes recommended (which may change according to the use) are:

CER 15.01.10* - Packaging containing residues of or contaminated by dangerous substances.

SECTION 14. Transport information.**14.1. UN number**

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to

IATA dangerous goods regulations.

14.2. UN proper shipping name.

ADN / ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflubenzuron)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflubenzuron)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diflubenzuron)

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9



IMDG: Class: 9 Label: 9



IATA: Class: 9 Label: 9

**14.4. Packing group**

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: Environmentally Hazardous

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 L	Tunnel restriction code: (-)
IMDG:	Special Provision: -	Limited Quantities: 5 L	
IATA:	EMS: F-A, S-F	Maximum quantity: 450 L	Packaging instructions: 964
	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	A97, A158, A197	
	Special Instructions:		

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant.

SECTION 15. Regulatory information.**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors

Restrictions on the marketing and use of certain dangerous substances and preparations

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Regulation (EC) No 850/2004 on persistent organic pollutants

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1	ENVIRONMENTAL HAZARDS	QUANTITY 1	QUANTITY 2
		100 t	200 t

15.2. Chemical safety assessment.

Refer to the protection and prevention measures in sections 7 and 8 of the datasheet.

SECTION 16. Other information.**MINISTRY OF HEALTH AUTHORIZATION N. 19033**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1.
STOT SE 2	Specific target organ toxicity - repeated exposure
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament

5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

11; 14.

Legend of the information contained at section 9.1 of the datasheet:

Not Applicable: the data or the characteristic is not applicable to the product in question, due to its nature.

Not Relevant: the data or the characteristic is not relevant to determine the hazardous characteristics of the product.

Not Available: the data or the characteristic, even though it would be potentially relevant to determine the characteristics of the product, is not available.