

Version 3 / 10200007862

1/11 Revision Date: 09.01.2018 Print Date: 09.08.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier		
Trade name	CONNECT SC113 4X5L BOT UA	
Product code (UVP)	05640059	
1.2 Relevant identified uses of	of the substance or mixture and uses advised against	
Use	Insecticide	
1.3 Details of the supplier of the safety data sheet		
Supplier	Bayer AG Kaiser-Wilhelm-Allee 1 51373 Leverkusen Germany	
Telefax	+49(0)2173-38-7394	
Responsible Department	Substance Classification & Registration +49(0)2173-38-3409 (during business hours only) Email: BCS-SDS@bayer.com	
1.4 Emergency telephone no.		
Emergency telephone no.	Global Incident Response Hotline (24h)	

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

+1 (760) 476-3964 (Company 3E for Bayer AG, Crop Science Division)

Acute aquatic toxicity: Category 1 H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Beta-Cyfluthrin
- Imidacloprid



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Signal word: Warning

Hazard statements

H410	Very toxic to aquatic life with long lasting effects.
EUH208	Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-
	isothiazolin-3-one (3:1), 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions for
	use.

Precautionary statements

P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Suspension concentrate (=flowable concentrate)(SC) Imidacloprid 100 g/l, Beta-cyfluthrin 12,5 g/l

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. /	Classification REGULATION (EC) No	Conc. [%]
	REACH Reg. No.	1272/2008	
Beta-Cyfluthrin	68359-37-5 269-855-7	Acute Tox. 2, H300, H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	1,16
Imidacloprid	138261-41-3 428-040-8	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	9,3
Mixture of: 5-chloro-2- methyl-4-isothiazolin-3- one and 2-methyl-4- isothiazolin-3-one	55965-84-9	Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	<= 0,0015
1,2-Benzisothiazol-3(2H)- one	2634-33-5 220-120-9	Aquatic Acute 1, H400 Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Irrit. 2, H315 Skin Sens. 1, H317	>= 0,005 - < 0,05



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Silica, amorphe	7631-86-9 231-545-4 01-2119379499-16-XXXX	Not classified	> 1
Glycerine	56-81-5 200-289-5	Not classified	> 1
1,2-Propanediol	57-55-6 200-338-0 01-2119456809-23-xxxx	Not classified	> 1

Further information

Beta-Cyfluthrin	68359-37-5	M-Factor: 10.000 (acute)
Imidacloprid	138261-41-3	M-Factor: 10 (acute), 10 (chronic)

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.	
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.	
Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.	
Ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. Do not leave victim unattended. Call a physician or poison control center immediately.	
4.2 Most important symptoms and effects, both acute and delayed		
Symptoms	Local:, Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing	
	Systemic:, discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy, Dizziness	



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4.3 Indication of any immedi	iate medical attention and special treatment needed
Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
Treatment	Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae.
	In case of skin irritation, application of oils or lotions containing vitamin E may be considered.

SECTION 5: FIREFIGHTING MEASURES

51	Extingu	ishina	media
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Suitable	Water spray, Carbon dioxide (CO2), Foam, Sand
Culture	
5.2 Special hazards arising from the substance or mixture	In the event of fire the following may be released:, Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx)
5.3 Advice for firefighters	
Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.
Further information	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions	Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.	
6.2 Environmental precautions	Do not allow to get into surface water, drains and ground water.	
6.3 Methods and materials for containment and cleaning up		
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.	



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6.4 Reference to other	Information regarding safe handling, see section 7.
sections	Information regarding personal protective equipment, see section 8.
	Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling		
Advice on safe handling	Use only in area provided with appropriate exhaust ventilation.	
Hygiene measures	Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).	
7.2 Conditions for safe storage, including any incompatibilities		
Requirements for storage areas and containers	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight.	
Advice on common storage	Keep away from food, drink and animal feedingstuffs.	
Suitable materials	HDPE (high density polyethylene)	
7.3 Specific end use(s)	Refer to the label and/or leaflet.	

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Beta-Cyfluthrin	68359-37-5	0,01 mg/m3 (TWA)		OES BCS*
Imidacloprid	138261-41-3	0,7 mg/m3 (TWA)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand protection	Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which



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	contact time. Wash gloves when contami inside, when perforated or v	s the danger of cuts, abrasion, and the inated. Dispose of when contaminated when contamination on the outside cannot requently and always before eating, the toilet. Nitrile rubber > 480 min > 0,4 mm Protective gloves complying with EN 374.
Eye protection	Wear goggles (conforming	to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	suspension
Colour	white to light beige
Odour	weak, characteristic
рН	4,0 - 5,0 at 100 % (23 °C)
Flash point	> 100 °C
Density	ca. 1,08 g/cm³ at 20 °C
Water solubility	miscible
Partition coefficient: n- octanol/water	Beta-Cyfluthrin: log Pow: 6,18 at 22 °C
	Imidacloprid: log Pow: 0,57
9.2 Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	
Thermal decomposition	Stable under normal conditions.
10.2 Chemical stability	Stable under recommended storage conditions.



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10.3 Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
10.4 Conditions to avoid	Extremes of temperature and direct sunlight.
10.5 Incompatible materials	Store only in the original container.
10.6 Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	LD50 (Rat) > 2.500 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 1,2 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration. No deaths
Acute dermal toxicity	LD50 (Rat) > 4.000 mg/kg
Skin irritation	No skin irritation (Rabbit)
Eye irritation	No eye irritation (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test

Assessment STOT Specific target organ toxicity - single exposure

Beta-Cyfluthrin: Based on available data, the classification criteria are not met. Imidacloprid: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

The toxic effects of Beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Beta-Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice. Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Beta-Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Beta-Cyfluthrin is related to parental toxicity.

Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity.



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Assessment developmental toxicity

Beta-Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Beta-Cyfluthrin are related to maternal toxicity. Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Toxicity to fish	LC50 (Lepomis macrochirus (Bluegill sunfish)) 0,2 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0,076 mg/l Exposure time: 48 h
Toxicity to aquatic plants	EC50 (Raphidocelis subcapitata (freshwater green alga)) > 100 mg/l Growth rate; Exposure time: 72 h
12.2 Persistence and degrada	ability
Biodegradability	Beta-Cyfluthrin: Not rapidly biodegradable Imidacloprid: Not rapidly biodegradable
Кос	Beta-Cyfluthrin: Koc: 508 - 3179 Imidacloprid: Koc: 225
12.3 Bioaccumulative potenti	al
Bioaccumulation	Beta-Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate. Imidacloprid: Does not bioaccumulate.
12.4 Mobility in soil	
Mobility in soil	Beta-Cyfluthrin: Immobile in soil Imidacloprid: Moderately mobile in soils
12.5 Results of PBT and vPvB	3 assessment
PBT and vPvB assessment	Beta-Cyfluthrin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). Imidacloprid: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
12.6 Other adverse effects	
Additional ecological information	No other effects to be mentioned.



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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Not completely emptied packagings should be disposed of as hazardous waste.
Waste key for the unused product	02 01 08* agrochemical waste containing hazardous substances

SECTION 14: TRANSPORT INFORMATION

ADR/RID/ADN

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S.
	(BETA-CYFLUTHRIN SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN SOLUTION)
9
III
YES
3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(BETA-CYFLUTHRIN SOLUTION)
9
III
YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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



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No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

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

Further information

WHO-classification: III (Slightly hazardous)

15.2 Chemical safety assessment

A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

- H300 Fatal if swallowed.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H331 Toxic if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %



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LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.