

Version 2/ZA 102000025842 1/11 Revision Date: 13.11.2018 Print Date: 10.06.2019

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING 1.1 Product identifier Trade name TEMPRID SC365,4 24X250ML BOT BR

Product code (UVP) 80212968

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

Use Insecticide

1.3 Details of the supplier of the safety data sheet

Supplier	Bayer (Pty) Ltd. 27 Wrench Road, P.O. Box 143 1600 Isando South Africa
Telephone	+27 (011) 921 5911
Telefax	+27 (011) 921 5766
Responsible Department	QHSE - Nigel, South Africa +27 (011) 365 8675 (during business hours only)
1.4 Emergency telephone no	
Emergency telephone no.	+27 (0861) 555 777 (Western Cape Poisons Helpline)
Global Incident Response Hotline (24h)	+1 (760) 476 3964 (Company 3E for Bayer AG, Crop Science Division)

## **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.

Acute toxicity: Category 4 H302 Harmful if swallowed.

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:

- Imidacloprid
- Beta-Cyfluthrin



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Signal word: Warning

#### **Hazard statements**

H302 H410 EUH208	Harmful if swallowed.
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). May produce an allergic reaction.

### **Precautionary statements**

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection. IF exposed or concerned: Call a POISON CENTER/ doctor/ physician. Collect spillage. Dispose of contents/container in accordance with local regulation.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
P391	Collect spillage.
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 243,6 g/l + Beta-Cyfluthrin 121,8 g/l

### Hazardous components

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

Name	CAS-No. /	Classification	Conc. [%]	
	EC-No. / REACH Reg. No.	REGULATION (EC) No 1272/2008		
Imidacloprid	138261-41-3	Acute Tox. 4, H302 Aquatic Chronic 1, H410 Aquatic Acute 1, H400	21,0	
Beta-Cyfluthrin	1820573-27-0	Acute Tox. 2, H300, H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	10,5	
reaction mass of 5-chloro-2-methyl-4-isothi azolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3- one [EC no. 220-239-6] (3:1)	55965-84-9	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	> 0,0015 - < 0,015	
Sulfonated aromatic polymer, sodium salt	68425-94-5	Eye Irrit. 2, H319	> 1 - < 10	
Glycerine	56-81-5	Not classified	> 1	



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### **Further information**

Imidacloprid	138261-41-3	M-Factor: 10 (acute), 10 (chronic)
Beta-Cyfluthrin	1820573-27- 0	M-Factor: 10.000 (acute)

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	s 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
4.3 Indication of any immedia	te medical attention and special treatment needed
Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.



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### 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**

5.1 Extinguishing media	
Suitable	Water spray, Foam, Carbon dioxide (CO2), Dry chemical
Unsuitable	None known.
5.2 Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
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). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
6.4 Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.



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## 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 bef using again. Garments that cannot be cleaned must be destroyed (bur	
7.2 Conditions for safe stora	ge, including any incompatibilities	
Requirements for storage areas and containers	Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Protect from frost. Keep away from direct sunlight.	

## 7.3 Specific end use(s) Refer to the label and/or leaflet.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0,7 mg/m3 (TWA)		OES BCS*
Beta-Cyfluthrin	1820573-27- 0	0,01 mg/m3 (TWA)		OES BCS*
Glycerine (Mist.)	56-81-5	10 mg/m3 (TWA)	1995	ZA REL

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

### 8.2 Exposure controls

Respiratory protection	of exposure. Respiratory protection shou short duration activities, who been taken to reduce expos	t required under anticipated circumstances and only be used to control residual risk of en all reasonably practicable steps have sure at source e.g. containment and/or yays follow respirator manufacturer's ing and maintenance.
Hand protection	breakthrough time which are Also take into consideration the product is used, such as contact time. Wash gloves when contami inside, when perforated or v	Nitrile rubber



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	Protective index Directive	Class 6 Protective gloves complying with EN 374.
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent)	
Skin and body protection	<ul> <li>Wear standard coveralls and Category 3 Type 6 suit.</li> <li>If there is a risk of significant exposure, consider a higher protective type suit.</li> <li>Wear two layers of clothing wherever possible. Polyester/cotton o cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.</li> <li>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.</li> </ul>	

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Form	suspension
Colour	white to beige
Odour	characteristic
Odour Threshold	No data available
рН	6,0 - 8,0 (100 %) (23 °C)
Flash point	>93,3 °C
Minimum ignition energy	Not applicable
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Density	1,16 g/cm³ ( 20 °C)
Water solubility	dispersible
Partition coefficient: n-octanol/water	Imidacloprid: log Pow: 0,57
	Beta-Cyfluthrin: log Pow: 6,18 (22 °C)
Viscosity, dynamic	200 - 500 mPa.s ( 20 °C) Velocity gradient 20 /s
	150 - 300 mPa.s ( 20 °C) Velocity gradient 100 /s
Explosivity	Not applicable
9.2 Other information	Further safety related physical-chemical data are not known.

## 9.1 Information on basic physical and chemical properties



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## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

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Thermal decomposition	Stable under normal conditions.
10.2 Chemical stability	Stable under recommended storage conditions.
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) > 1.044 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 2,03 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. highest concentration tested No deaths
	LC50 (Rat) > 8,12 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50.
Acute dermal toxicity	LD50 (Rat) > 2.000 mg/kg
Skin corrosion/irritation	slight irritation (Rabbit)
Serious eye damage/eye irritation	Mild eye irritation. (Rabbit)
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test

### Assessment STOT Specific target organ toxicity – single exposure

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

### Assessment STOT Specific target organ toxicity - repeated exposure

Imidacloprid did not cause specific target organ toxicity in experimental animal studies. The toxic effects of Beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

### Assessment mutagenicity

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

Beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.



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#### Assessment carcinogenicity

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

#### Assessment toxicity to reproduction

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. 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.

#### Assessment developmental toxicity

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

#### Aspiration hazard

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

## **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity	
Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 211 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient imidacloprid.
	LC50 (Oncorhynchus mykiss (rainbow trout)) 0,000068 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 85 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imidacloprid.
	EC50 (Daphnia magna (Water flea)) 0,00029 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient beta-cyfluthrin.
Toxicity to aquatic plants	EC50 (Desmodesmus subspicatus (green algae)) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient imidacloprid.
	EC50 (Desmodesmus subspicatus (green algae)) > 0,01 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient beta-cyfluthrin. No acute toxicity was observed at its limit of water solubility.
12.2 Persistence and degrada	ıbility
Biodegradability	Imidacloprid: Not rapidly biodegradable Beta-Cyfluthrin: Not rapidly biodegradable
Кос	Imidacloprid: Koc: 225 Beta-Cyfluthrin: Koc: 508 - 3179



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12.3 Bioaccumulative potenti	al
Bioaccumulation	Imidacloprid: Does not bioaccumulate. Beta-Cyfluthrin: Bioconcentration factor (BCF) 506 Does not bioaccumulate.
12.4 Mobility in soil	
Mobility in soil	Imidacloprid: Moderately mobile in soils Beta-Cyfluthrin: Immobile in soil
12.5 Results of PBT and vPvB	3 assessment
PBT and vPvB assessment	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). 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).
12.6 Other adverse effects	
Additional ecological information	No other effects to be mentioned.

## **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.

## **SECTION 14: TRANSPORT INFORMATION**

SANS 10231

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	
14.5 Environm. Hazardous Mark	YES
IMDG	
14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
14.3 Transport hazard class(es)	(BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION) 9
14.4 Packaging Group	9 
14.5 Marine pollutant	YES
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IATA	
14.1 UN number	3082



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14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION )
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Environm. Hazardous Mark	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** 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: II (Moderately hazardous)

## **SECTION 16: OTHER INFORMATION**

### Text of the hazard statements mentioned in Section 3

H300	Fatal if swallowed.
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- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H330 Fatal 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 %



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IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
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.