



TEMPRID SC

Version 2 / SGP
102000025842

1/12

Revision Date: 24.01.2022
Print Date: 10.02.2022

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

1.1 Product identifier

Trade name TEMPRID SC
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 AG
Kaiser-Wilhelm-Allee
51373 Leverkusen
Germany

Local distributor Bayer (South East Asia) Pte Ltd
2 Tanjong Katong Road,
#07-01, Paya Lebar Quarter, Singapore 437161

Telephone: +65 6496 1888 (during office hour)
Telefax +65 64961491

1.4 Emergency telephone no.

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 according to Singapore Standard SS586: 2008 (2014)

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 according to Singapore Standard SS586: 2008 (2014)

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

**TEMPRID SC**Version 2 / SGP
102000025842

2/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

- Imidacloprid
- Beta-Cyfluthrin
- Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt

**Signal word:** Warning**Hazard statements**

H302 Harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P264 Wash face, hands and any exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
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).

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).

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

Name	CAS-No.	Conc. [%]
Imidacloprid	138261-41-3	21.0
Beta-Cyfluthrin	1820573-27-0	10.5
Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	> 1 – < 10
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	> 0.0015 – < 0.015
Glycerine	56-81-5	> 1

Further information

**TEMPRID SC**Version 2 / SGP
102000025842

3/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

Imidacloprid	138261-41-3	M-Factor: 10 (acute), 10 (chronic)
Beta-Cyfluthrin	1820573-27-0	M-Factor: 10,000 (acute)

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
-----------------	---

4.3 Indication of any immediate medical attention and special treatment needed

Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
--------------	--

**TEMPRID SC**Version 2 / SGP
102000025842**4/12**

Revision Date: 24.01.2022

Print Date: 10.02.2022

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**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.

**TEMPRID SC**Version 2 / SGP
102000025842

5/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

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.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling**

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition.

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 cool, well-ventilated place. Store in a place accessible by authorized persons only. Protect from frost. Keep away from direct sunlight.

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

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
Imidacloprid	138261-41-3	0.7 mg/m ³ (TWA)		OES BCS*
Beta-Cyfluthrin	1820573-27-0	0.01 mg/m ³ (TWA)		OES BCS*
Glycerine (Mist.)	56-81-5	10 mg/m ³ (TWA)	2006	SG OEL

*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

**TEMPRID SC**Version 2 / SGP
102000025842

6/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

instructions regarding wearing and maintenance.

Suitable respiratory equipment:

Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.

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 the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material	Nitrile rubber
Rate of permeability	> 480 min
Glove thickness	> 0.4 mm
Protective index	Class 6
Directive	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.

Appropriate engineering control measures: Refer to section 7

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
pH	6.0 - 8.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	> 93.3 °C
Flammability	No data available
Auto-ignition temperature	No data available

**TEMPRID SC**Version 2 / SGP
102000025842

7/12

Revision Date: 24.01.2022
Print Date: 10.02.2022

Minimum ignition energy	Not applicable
Self-accelarating decomposition temperature (SADT)	No data available
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/cm ³ (20 °C)
Relative density	No data available
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
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Not applicable
9.2 Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	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
----------------------------	--------------------------

**TEMPRID SC**Version 2 / SGP
102000025842

8/12

Revision Date: 24.01.2022
Print Date: 10.02.2022

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	Slight irritant effect - does not require labelling. (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 neurobehavioral effects 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.

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.

**TEMPRID SC**Version 2 / SGP
102000025842

9/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

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 degradability**Biodegradability**

Imidacloprid:
Not rapidly biodegradable
Beta-Cyfluthrin:
Not rapidly biodegradable

Koc

Imidacloprid: Koc: 225
Beta-Cyfluthrin: Koc: 508 - 3179

12.3 Bioaccumulative potential**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 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

**TEMPRID SC**Version 2 / SGP
102000025842

10/12

Revision Date: 24.01.2022

Print Date: 10.02.2022

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**ADR/RID/ADN**

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

III

14.5 Environm. Hazardous Mark

YES

Hazard no.

90

Tunnel Code

-

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

IMDG

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

III

14.5 Marine pollutant

YES

IATA

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

III

14.5 Environm. Hazardous Mark

YES

**TEMPRID SC**Version 2 / SGP
102000025842

11/12

Revision Date: 24.01.2022
Print Date: 10.02.2022**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)

Applicable national regulationControl of Vectors and Pesticides Act
Workplace Safety and Health (general provisions) Regulations**SECTION 16: OTHER INFORMATION****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 _x	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)
IC _x	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LC _x	Lethal concentration to x %
LD _x	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



TEMPRID SC

Version 2 / SGP
102000025842

12/12

Revision Date: 24.01.2022
Print Date: 10.02.2022

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Singapore Standard SS586:2008 (2014) 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. Addressees are requested to observe any additional national requirements.

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection.

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