

 TEMPRID

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

# SECTION 1: IDENTIFICATION OF THE HAZARDOUS CHEMICAL AND OF THE SUPPLIER

1.1 Product identifier

Trade name TEMPRID 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 Local distributor

Kaiser-Wilhelm-Allee 1 Bayer Co. (Malaysia) Sdn Bhd

51373 Leverkusen B-19-1 & B-19-2, Germany The Ascent Paradigm,

No. 1, Jalan SS 7/26A, Kelana

Jaya,

47301 Petaling Jaya, Selangor.

Malaysia

**Telephone** 03 7801 3088 (office hours)

Telefax 03 7886 3338

1.4 Emergency telephone no.

In case of POISONING, please contact

Malaysian Emergency Response Services (999)



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 the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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.



 TEMPRID

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

#### 2.2 Label elements

Labelling according to the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Hazard label for supply/use required.

### Hazardous components which must be listed on the label:

- 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).

# SECTION 3: COMPOSITION AND INFORMATION OF THE INGREDIENTS OF THE HAZARDOUS CHEMICAL

## 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
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
Sulfonated aromatic polymer, sodium salt	68425-94-5	> 1 – < 10
Glycerine	56-81-5	> 1

#### **Further information**



 TEMPRID

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

Imidacloprid	138261-41-3	M-Factor: 10 (acute), 10 (chronic)
Beta-Cyfluthrin	1820573-27- 0	M-Factor: 10,000 (acute)
reaction mass of 5- chloro-2- methyl- 2H-isothiazol-3- one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	M-Factor: 100 (acute), 100 (chronic)
		M-Factor: 100 (acute), 100 (chronic)

#### **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 Version 1/MAL Revision Date: 23.01.2021 102000025842 Print Date: 01.02.2021

#### **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

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

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 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

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/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)	03 2000	MY OEL

<sup>\*</sup>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

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

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 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.

# **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

Minimum ignition energyNot applicableSelf-accelaratingNo data available

decomposition temperature



customersonli

 TEMPRID

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

(SADT)

Upper explosion limit

Lower explosion limit

No data available

Vapour pressure

No data available

Evaporation rate

Relative vapour density

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

Oxidizing properties

No data available

No data available

No data available

No data available

**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.

**10.3 Possibility of 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



customerson

 TEMPRID

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

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 Mild eye irritation. (Rabbit)

irritation

**Respiratory or skin** Skin: Non-sensitizing. (Guinea pig) sensitisation 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

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

# **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

 Version 1 / MAL
 Revision Date: 23.01.2021

 102000025842
 Print Date: 01.02.2021

very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological

information

No other effects to be mentioned.

## **SECTION 13: DISPOSAL INFORMATION**

#### 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)
14.4 Packaging Group
14.5 Environm. Hazardous Mark
Hazard no.
7 Unnel Code
9

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

Version 1 / MAL Revision Date: 23.01.2021 102000025842 Print Date: 01.02.2021

#### 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**

The information contained within this Safety Data Sheet is in accordance to The Industry Code of Practice on Chemical Classification and Hazard Communication 2013 (ICOP) which is promulgated under Section 37 of Occupational Safety and Health Act 1994 (OSHA 1994) and serves as a guidance to chemical suppliers to comply with the provisions of Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 [P.U. (A) 310/2013] which have been gazetted on 11 October 2013, hereinafter is referred to as "the Regulations". This data sheet complements the user's instructions, but does not replace them. The information contained therein 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 the current Malaysia legislation, including the Pesticides Act 1974. 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.