



## **MAXFORCE FORTE**

Version 2 / SGP  
102000022527

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Revision Date: 15.02.2022  
Print Date: 17.02.2022

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

#### **1.1 Product identifier**

**Trade name** MAXFORCE FORTE  
**Product code (UVP)** 79717598

#### **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)

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### **SECTION 2: HAZARDS IDENTIFICATION**

#### **2.1 Classification of the substance or mixture**

**Classification according to Singapore Standard SS586: 2008 (2014)**

Chronic aquatic toxicity: Category 3  
H412 Harmful 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:**

- Fipronil

#### **Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

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

**2.3 Other hazards**

No additional hazards known beside those mentioned.

Fipronil: 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**Bait (ready for use) (RB)  
Fipronil 0,05%**Hazardous components**

| Name   | CAS-No.     | Conc. [%]              |
|--|-------------|------------------------|
| Fipronil   | 120068-37-3 | 0.05                   |
| 1,2-Benzisothiazol-3(2H)-one   | 2634-33-5   | $\geq 0.05 - < 1.0$    |
| reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | 55965-84-9  | $\geq 0.0015 - < 0.06$ |

**Further information**

|                              |           |                      |
|------------------------------|-----------|----------------------|
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | M-Factor: 10 (acute) |
|------------------------------|-----------|----------------------|

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

|                       |   |
|-----------------------|---|
| <b>General advice</b> | Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely.   |
| <b>Inhalation</b>     | Move to fresh air. Call a physician or poison control center immediately.   |
| <b>Skin contact</b>   | Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.                                  |
| <b>Eye contact</b>    | In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists. |
| <b>Ingestion</b>      | Do NOT induce vomiting. Call a physician or poison control center immediately.  |

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

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**Symptoms** Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s). The following symptoms may occur: Restlessness, anxiety, Tremors

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

**Treatment** There is no specific antidote. Carefully monitor the respiratory functions. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. Oxygen or artificial respiration if needed. Keep respiratory tract clear. 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. Symptoms of poisoning may appear several hours later. Keep under medical supervision for at least 48 hours.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

**Suitable** Water spray, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

**Unsuitable** High volume water jet

**5.2 Special hazards arising from the substance or mixture** In the event of fire the following may be released: Carbon monoxide (CO), Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides, Hydrogen chloride (HCl), Hydrogen fluoride

**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** Fight fire from upwind position. Keep out of smoke. 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. Keep unauthorized people away. Isolate hazard area.

**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** The nature of this product, when contained in commercial packs, makes spillage unlikely. However, if significant amounts are spilled nevertheless, the following advice is applicable. 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.

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**Additional advice** Check also for any local site procedures.**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** Ensure adequate ventilation. No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Avoid contact with skin, eyes and clothing.**Hygiene measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Wash hands immediately after work, if necessary take a shower. Smoking, eating and drinking should be prohibited in the application area.**7.2 Conditions for safe storage, including any incompatibilities****Requirements for storage areas and containers** Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep away from direct sunlight.**Advice on common storage** Keep away from food, drink and animal feedingstuffs.**Suitable materials** Use of Bulk packaging at formulation site for temporary transport only! Polyethylene film within an outer package**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    |
|------------|-------------|----------------------------------|--------|----------|
| Fipronil   | 120068-37-3 | 0.035 mg/m <sup>3</sup><br>(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.

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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                                 |
| 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 4 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.

**General protective measures**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

Appropriate engineering control measures: Refer to section 7

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

|  |                                       |
|--|---------------------------------------|
| Form   | gel                                   |
| Colour   | brown                                 |
| Odour  | weak, characteristic                  |
| Odour Threshold                                    | No data available                     |
| pH   | 5 - 7 (1 %) (23 °C) (deionized water) |
| Melting point/range                                | No data available                     |
| Boiling Point                                      | No data available                     |
| Flash point  | No data available                     |
| Flammability                                       | No data available                     |
| Auto-ignition temperature                          | No data available                     |
| Self-accelarating decomposition temperature (SADT) | No data available                     |
| Upper explosion limit                              | No data available                     |

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|   |  |
|---|--|
| <b>Lower explosion limit</b>                  | No data available  |
| <b>Vapour pressure</b>                        | No data available  |
| <b>Evaporation rate</b>                       | No data available  |
| <b>Relative vapour density</b>                | No data available  |
| <b>Density</b>                                | ca. 1.18 g/cm <sup>3</sup> (20 °C)                           |
| <b>Relative density</b>                       | No data available  |
| <b>Water solubility</b>                       | No data available  |
| <b>Partition coefficient: n-octanol/water</b> | No data available  |
| <b>Viscosity, dynamic</b>                     | >= 5,000 mPa.s (20 °C) Velocity gradient 7.5 /s              |
| <b>Viscosity, kinematic</b>                   | No data available  |
| <b>Oxidizing properties</b>                   | No data available  |
| <b>Explosivity</b>                            | No data available  |
| <b>9.2 Other information</b>                  | Further safety related physical-chemical data are not known. |

**SECTION 10: STABILITY AND REACTIVITY**

|  |  |
|--|--|
| <b>10.1 Reactivity</b>                         | Stable under normal conditions.  |
| <b>10.2 Chemical stability</b>                 | Stable under recommended storage conditions.   |
| <b>10.3 Possibility of hazardous reactions</b> | No hazardous reactions when stored and handled according to prescribed instructions. |
| <b>10.4 Conditions to avoid</b>                | Extremes of temperature and direct sunlight.   |
| <b>10.5 Incompatible materials</b>             | Store only in the original container.  |
| <b>10.6 Hazardous decomposition products</b>   | No decomposition products expected under normal conditions of use.                   |

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

|  |   |
|--|---|
| <b>Acute oral toxicity</b>               | LD50 (Rat) > 2,000 mg/kg                                      |
| <b>Acute inhalation toxicity</b>         | Not relevant  |
| <b>Acute dermal toxicity</b>             | LD50 (Rat) > 2,000 mg/kg                                      |
| <b>Skin corrosion/irritation</b>         | Slight irritant effect - does not require labelling. (Rabbit) |
| <b>Serious eye damage/eye irritation</b> | Slight irritant effect - does not require labelling. (Rabbit) |

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OECD Test Guideline 406, Buehler test**Assessment STOT Specific target organ toxicity – single exposure**

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

**Assessment STOT Specific target organ toxicity – repeated exposure**

Fipronil caused specific target organ toxicity in experimental animal studies in the following organ(s): Liver. Fipronil caused neurobehavioral effects and/or neuropathological changes in animal studies.

**Assessment mutagenicity**

Fipronil was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**

Fipronil caused an increased incidence of tumours in rats in the following organ(s): Thyroid. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

**Assessment toxicity to reproduction**

Fipronil 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 Fipronil is related to parental toxicity.

**Assessment developmental toxicity**

Fipronil did not cause developmental toxicity in rats and rabbits.

**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)) 0.25 mg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient fipronil.**Toxicity to aquatic invertebrates**EC50 (Daphnia magna (Water flea)) 0.19 mg/l  
Exposure time: 48 h  
The value mentioned relates to the active ingredient fipronil.LC50 (Mysidopsis bahia (mysid shrimp)) 0.14 µg/l  
Exposure time: 96 h  
The value mentioned relates to the active ingredient fipronil.**Chronic toxicity to aquatic invertebrates**NOEC (Mysidopsis bahia (mysid shrimp)): 0.0077 µg/l  
Exposure time: 28 d  
The value mentioned relates to the active ingredient fipronil.**Toxicity to aquatic plants**EC50 (Desmodesmus subspicatus (green algae)) 0.068 mg/l  
Exposure time: 96 h

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The value mentioned relates to the active ingredient fipronil.

**12.2 Persistence and degradability****Biodegradability** Fipronil:  
Not rapidly biodegradable**Koc** Fipronil: Koc: 427 - 1278**12.3 Bioaccumulative potential****Bioaccumulation** Fipronil: Bioconcentration factor (BCF) 321  
Does not bioaccumulate.**12.4 Mobility in soil****Mobility in soil** Fipronil: Slightly mobile in soils**12.5 Results of PBT and vPvB assessment****PBT and vPvB assessment** Fipronil: 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****ADR/RID/ADN**

|                                 |  |
|---------------------------------|--|
| 14.1 UN number                  | <b>3082</b>  |
| 14.2 Proper shipping name       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(FIPRONIL 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**



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|                                 |   |
|---------------------------------|---|
| 14.1 UN number                  | <b>3082</b>   |
| 14.2 Proper shipping name       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S.<br>(FIPRONIL SOLUTION) |
| 14.3 Transport hazard class(es) | 9   |
| 14.4 Packaging Group            | III   |
| 14.5 Marine pollutant           | YES   |

**IATA**

|                                 |  |
|---------------------------------|--|
| 14.1 UN number                  | <b>3082</b>  |
| 14.2 Proper shipping name       | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,<br>N.O.S.<br>(FIPRONIL 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.

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**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)

**Applicable national regulation**Control of Vectors and Pesticides Act  
Workplace Safety and Health (general provisions) Regulations

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**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 <sub>x</sub> | 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   |

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|-----------|--|
| 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 %   |
| 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 data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.

**Reason for Revision:** Reviewed and updated for general editorial purposes.

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