1. Identification

Product identifier

Goliath® Gel

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

Relevant identified uses: biocide, insecticide

Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Crop Protection

Telephone: +49 621 60-27777
E-mail address: Produktinformation-Pflanzenschutz@basf.com

Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 5 (oral)
Aquatic Acute 1
Aquatic Chronic 1
Label elements

Globally Harmonized System (GHS)

Pictogram:

![Pictogram](image)

Signal Word:
Warning

Hazard Statement:
H303 May be harmful if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Response):
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P391 Collect spillage.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

Other hazards

According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature
Biocidal product, insecticide, Bait

Hazardous ingredients (GHS)
According to UN GHS criteria

fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

- Content (W/W): 0.05 %
- CAS Number: 120068-37-3
- EC Number: 424-610-5
- INDEX-Number: 608-055-00-8
- Acute Tox. 2 (Inhalation - dust)
- Acute Tox. 3 (oral)
- Acute Tox. 3 (dermal)
- STOT RE (Central nervous system) 1
- Aquatic Acute 1
- Aquatic Chronic 1
- M-factor acute: 1000
- M-factor chronic: 10000
- H311, H330, H301, H372, H400, H410

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

Description of first aid measures
If inhaled:
Keep patient calm, remove to fresh air.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Most important symptoms and effects, both acute and delayed
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media
Suitable extinguishing media:
water spray, carbon dioxide, foam, dry powder
Special hazards arising from the substance or mixture

carbon monoxide, Carbon dioxide, Hydrogen chloride, Hydrogen fluoride, nitrogen oxides, sulfur oxides, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.

Environmental precautions
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

Precautions for safe handling
No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
No special precautions necessary. The substance/product is non-combustible. Product is not explosive.
Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds.
Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:
Storage duration: 36 Months

Protect from temperatures above: 35 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits
No occupational exposure limits known.

Exposure controls

Personal protective equipment

Respiratory protection:
Respiratory protection not required.

Hand protection:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.
9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form: gel
Colour: brown
Odour: odourless
Odour threshold: not applicable, odour not perceivable
pH value: approx. 5 - 7 (10 g/l, 21 °C)
Melting point: The product has not been tested.
Boiling point: The product has not been tested.
Flash point: Non-flammable.
Evaporation rate: not applicable
Flammability: No dangerous quantities of flammable gases will be produced by contact with water (Directive 92/69/EEC, A.12)
Lower explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit: As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapour pressure: approx. 23 hPa (20 °C)
Density: approx. 1.27 g/cm³ (20 °C)
Relative vapour density (air): not applicable
Solubility in water: dispersible
Partitioning coefficient n-octanol/water (log Kow): not applicable
Thermal decomposition: 120 °C, 210 kJ/kg (DSC (OECD 113)) (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See MSDS section 7 - Handling and storage.

Incompatible materials
Substances to avoid:
strong bases, strong acids, strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity
Assessment of acute toxicity:
Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:
LD50 rat (oral): 4.400 mg/kg (OECD Guideline 401)
LC50 (by inhalation):
The product has not been tested. The statement has been derived from the properties of the individual components.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)

*Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile*

Experimental/calculated data:

LC50 rat (by inhalation): 0,36 mg/l 4 h (OECD Guideline 403)
Tested as dust aerosol.

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**Irritation**

Assessment of irritating effects:
Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

**Respiratory/Skin sensitization**

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:
Guinea pig maximization test guinea pig: Skin sensitizing effects were not observed in animal studies.

**Germ cell mutagenicity**

Assessment of mutagenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

**Carcinogenicity**

Assessment of carcinogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile*

Assessment of carcinogenicity:
In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile

Assessment of repeated dose toxicity:
Causes mortality and signs of neurotoxicity through prolonged or repeated exposure.

Aspiration hazard

The product has not been tested. The statement has been derived from the properties of the individual components.
No aspiration hazard expected.

Other relevant toxicity information

Misuse can be harmful to health.
12. Ecological Information

Toxicity

Assessment of aquatic toxicity:
Very toxic to aquatic life with long lasting effects.
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile
Toxicity to fish:
LC50 (96 h) 0.0852 mg/l, Lepomis macrochirus

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile
Aquatic invertebrates:
EC50 (48 h) 0.19 mg/l, Daphnia magna

LC50 (48 h) 0.00017 mg/l, Mysis bahia

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile
Aquatic plants:
EC50 (72 h) 0.103 mg/l (growth rate), Scenedesmus subspicatus

No observed effect concentration (72 h) > 0.14 mg/l, Pseudokirchneriella subcapitata

EC50 (14 d) > 0.16 mg/l (biomass), Lemna gibba

No observed effect concentration (14 d) > 0.16 mg/l (biomass), Lemna gibba

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile
Chronic toxicity to fish:
No observed effect concentration (35 d) 0.0029 mg/l, Cyprinodon variegatus

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[trifluoromethyl]sulfinyl]-1H-pyrazole-3-carbonitrile
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d) 0.00098 mg/l, Daphnia magna

No observed effect concentration (28 d) 0.000008 mg/l, Mysis bahia
Persistence and degradability

Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile*

Assessment biodegradation and elimination (H2O):
*Not readily biodegradable (by OECD criteria).*

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Bioaccumulative potential

Assessment bioaccumulation potential:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile*

Bioaccumulation potential:
*Bioconcentration factor: 321, Lepomis macrochirus*
*Accumulation in organisms is not to be expected.*

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Mobility in soil

Assessment transport between environmental compartments:
Volatility: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile*

Assessment transport between environmental compartments:
*Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.*

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Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information
Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

**Waste treatment methods**

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

**Land transport**

ADR

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<tr>
<td>Transport hazard class(es)</td>
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<td>Packing group:</td>
<td>III</td>
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<td>Environmental hazards:</td>
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<td>Special precautions for user:</td>
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<td>9, EHSM</td>
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<td>Packing group:</td>
<td>III</td>
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<tr>
<td>Environmental hazards:</td>
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<td>Special precautions for user:</td>
<td>None known</td>
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**Inland waterway transport**

ADN

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</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>9, EHSM</td>
</tr>
</tbody>
</table>
### Transport in inland waterway vessel

Not evaluated

### Sea transport

#### IMDG

| Packing group: | III |
| Environmental hazards: | yes |
| Special precautions for user: | None known |

#### Air transport

#### IATA/ICAO

| UN number: | UN 3082 |
| UN proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FIPRONIL) |
| Transport hazard class(es): | 9, EHSM |
| Packing group: | III |
| Environmental hazards: | yes |
| Special precautions for user: | Marine pollutant: YES, None known |

### UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

### UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

### Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.
15. Regulatory Information

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

- **Acute Tox.** Acute toxicity
- **Aquatic Acute** Hazardous to the aquatic environment - acute
- **Aquatic Chronic** Hazardous to the aquatic environment - chronic
- **STOT RE** Specific target organ toxicity — repeated exposure
- **H311** Toxic in contact with skin.
- **H330** Fatal if inhaled.
- **H301** Toxic if swallowed.
- **H372** Causes damage to organs through prolonged or repeated exposure.
- **H400** Very toxic to aquatic life.
- **H410** Very toxic to aquatic life with long lasting effects.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the
responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.