# INSPIRE XT

| Version | Revision Date: | SDS Number: | Date of last issue: 01/28/2021 |
|---|---|---|---|
| 3.0 | 09/10/2026 | S1375175153 | Date of first issue: 11/27/2018 |

## SECTION 1. IDENTIFICATION

Product name : INSPIRE XT
Design code : A8122B

Product Registration number : 100-1312

**Manufacturer or supplier's details**

Company name of supplier : Syngenta Crop Protection, LLC
Address : Post Office Box 18300
Greensboro NC 27419
United States of America (USA)

Telephone : 1 800 334 9481
Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com
Emergency telephone : 1 800 888 8372

**Recommended use of the chemical and restrictions on use**

Recommended use : Fungicide

Restrictions on use : General Use Pesticide

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

**Hazards for the product as supplied**

Flammable liquids : Category 4

Skin irritation : Category 2

Serious eye damage : Category 1

Skin sensitization : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Aspiration hazard : Category 1

**Other hazards**

None known.

**GHS label elements**

Hazard pictograms :



Signal Word : Danger

Hazard Statements :
H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.

Supplemental Hazard Statements : Corrosive to the respiratory tract.

Precautionary Statements :

**Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|---|---|---|---|
| hydrocarbons, C10, aromatics, < 1% naphthalene | - | >= 15 - <= 40 | TSC |
| propiconazole (ISO) | 60207-90-1* | 22.9358 | - |
| difenoconazole (ISO) | 119446-68-3* | 22.9358 | - |
| ammonium cumenesulphonate | 680972-33-2* | >= 1 - <= 5 | TSC |
| calcium dodecylbenzene sulphonate | 26264-06-2* | >= 1 - <= 5 | TSC |
| amines, coco alkyl, ethoxylated | 61791-14-8* | >= 1 - <= 5 | TSC |
| 2-methylpropan-1-ol | 78-83-1* | >= 0.5 - <= 1.5 | TSC |
| naphthalene | 91-20-3* | >= 0.1 - <= 1 | TSC |
| toluene | 108-88-3* | >= 0.1 - <= 1 | TSC |

* Indicates that the identifier is a CAS No.
TSC- the actual concentration or concentration range is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled : Take the victim into fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control center immediately.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.

| | | |
|---|---|---|
| | | If skin irritation persists, call a physician.<br>Wash contaminated clothing before re-use. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>Remove contact lenses.<br>Immediate medical attention is required. |
| If swallowed | : | If swallowed, seek medical advice immediately and show this container or label.<br>Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. |
| Most important symptoms and effects, both acute and delayed | : | Aspiration may cause pulmonary edema and pneumonitis.<br>May be fatal if swallowed and enters airways.<br>Causes skin irritation.<br>May cause an allergic skin reaction.<br>Causes serious eye damage.<br>May cause drowsiness or dizziness.<br>Suspected of causing cancer.<br>Suspected of damaging the unborn child.<br>Corrosive to the respiratory tract. |
| Notes to physician | : | There is no specific antidote available.<br>Treat symptomatically.<br>Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Extinguishing media - small fires<br>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.<br>Extinguishing media - large fires<br>Alcohol-resistant foam |
| Unsuitable extinguishing media | : | Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards during fire fighting | : | As the product contains combustible organic ingredients, fire will produce dense black smoke containing hazardous products of combustion (see section 10).<br>Exposure to decomposition products may be a hazard to health.<br>Flash back possible over considerable distance. |
| Hazardous combustion products | : | Carbon oxides<br>Nitrogen oxides (NOx)<br>Chlorine compounds<br>Sulfur oxides |
| Further information | : | Do not allow run-off from fire fighting to enter drains or water courses.<br>Cool closed containers exposed to fire with water spray. |
| Special protective equipment for fire-fighters | : | Wear full protective clothing and self-contained breathing apparatus. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
Keep people away from and upwind of spill/leak.
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Remove all sources of ignition.
Pay attention to flashback.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
Use only in an area containing flame proof equipment.
Take precautionary measures against static discharges.
For personal protection see section 8.

Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from combustible material.
Keep in an area equipped with sprinklers.
Keep away from food, drink and animal feedingstuffs.
No smoking.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| propiconazole (ISO) | 60207-90-1 | TWA | 5 mg/m3 | Syngenta |
| difenoconazole (ISO) | 119446-68-3 | TWA | 5 mg/m3 | Syngenta |
| 2-methylpropan-1-ol | 78-83-1 | TWA | 50 ppm | ACGIH |
| | | TWA | 50 ppm<br>150 mg/m3 | NIOSH REL |
| | | TWA | 100 ppm<br>300 mg/m3 | OSHA Z-1 |

| | | | | |
|---|---|---|---|---|
| | | TWA | 50 ppm<br>150 mg/m3 | OSHA P0 |
| naphthalene | 91-20-3 | TWA | 10 ppm | ACGIH |
| | | TWA | 10 ppm<br>50 mg/m3 | NIOSH REL |
| | | ST | 15 ppm<br>75 mg/m3 | NIOSH REL |
| | | TWA | 10 ppm<br>50 mg/m3 | OSHA Z-1 |
| | | TWA | 10 ppm<br>50 mg/m3 | OSHA P0 |
| | | STEL | 15 ppm<br>75 mg/m3 | OSHA P0 |
| toluene | 108-88-3 | TWA | 20 ppm | ACGIH |
| | | TWA | 100 ppm<br>375 mg/m3 | NIOSH REL |
| | | ST | 150 ppm<br>560 mg/m3 | NIOSH REL |
| | | TWA | 200 ppm | OSHA Z-2 |
| | | CEIL | 300 ppm | OSHA Z-2 |
| | | Peak | 500 ppm<br>(10 minutes) | OSHA Z-2 |
| | | TWA | 100 ppm<br>375 mg/m3 | OSHA P0 |
| | | STEL | 150 ppm<br>560 mg/m3 | OSHA P0 |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sam-pling time | Permissible concentra-tion | Basis |
|---|---|---|---|---|---|---|
| toluene | 108-88-3 | Toluene | In blood | Prior to last shift of work-week | 0.02 mg/l | ACGIH BEI |
| | | Toluene | Urine | End of shift (As soon as possible after exposure ceases) | 0.03 mg/l | ACGIH BEI |
| | | o-Cresol | Urine | End of shift (As soon as possible after exposure ceases) | 0.3 mg/g creatinine | ACGIH BEI |

**Engineering measures** : THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL

APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.
Where necessary, seek additional occupational hygiene advice.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. 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. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.
Tightly fitting safety goggles
Face-shield

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Remove and wash contaminated clothing before re-use.
Wear as appropriate:
Impervious clothing

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

| | | |
|---|---|---|
| Color | : | yellow to brown |
| Odor | : | aromatic |
| Odor Threshold | : | No data available |
| pH | : | 6 - 10<br>Concentration: 1 %w/v |
| Initial boiling point and boiling range | : | > 338 °F / > 170 °C |
| Flash point | : | 142 °F / 61 °C<br>Method: Pensky-Martens closed cup, Equilibrium method |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Density | : | 1.07 - 1.11 g/cm3 (68 °F / 20 °C) |
| Solubility(ies) | | |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | 833 °F / 445 °C |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | 19.7 - 30.9 mPa.s (104 °F / 40 °C)<br>48.8 mPa.s (68 °F / 20 °C) |
| Viscosity, kinematic | : | No data available |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |
| Surface tension | : | 33.5 mN/m, 77 °F / 25 °C |

Particle characteristics
Particle size : No data available

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | None reasonably foreseeable. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | : | No decomposition if used as directed. |
| Incompatible materials | : | None known. |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

Ingestion
Inhalation
Skin contact
Eye contact

**Acute toxicity**

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

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, female): > 2,000 - < 3,000 mg/kg<br>Remarks: Based on data from similar materials |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 2.94 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rat, male and female): > 4,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity<br>Remarks: Based on data from similar materials |

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, female): 550 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 5.8 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

**difenoconazole (ISO):**

Acute oral toxicity : LD50 (Rat, male and female): 1,453 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 3.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,010 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

**amines, coco alkyl, ethoxylated:**

Acute oral toxicity : LD50 (Rat): 1,700 mg/kg

**2-methylpropan-1-ol:**

Acute oral toxicity : LD50 (Rat): 2,830 - 3,350 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 24.6 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): 2,460 mg/kg

**naphthalene:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

**toluene:**

Acute oral toxicity : LD50 (Rat, male): 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 25.7 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male): > 5,000 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Species : Rabbit
Result : Irritating to skin.

Remarks : Based on data from similar materials

**Components:**

**hydrocarbons, C10, aromatics, < 1% naphthalene:**
Result : Repeated exposure may cause skin dryness or cracking.

**propiconazole (ISO):**
Species : Rabbit
Result : No skin irritation

**difenoconazole (ISO):**
Species : Rabbit
Result : No skin irritation

**ammonium cumenesulphonate:**
Species : Rabbit
Result : Irritating to skin.

**calcium dodecylbenzene sulphonate:**
Result : Irritating to skin.

**2-methylpropan-1-ol:**
Result : Irritating to skin.

**toluene:**
Species : Rabbit
Result : Irritating to skin.

**Serious eye damage/eye irritation**
Causes serious eye damage.

**Product:**
Species : Rabbit
Result : Risk of serious damage to eyes.
Remarks : Based on data from similar materials

**Components:**

**propiconazole (ISO):**
Species : Rabbit
Result : No eye irritation

**difenoconazole (ISO):**
Species : Rabbit
Result : Irritation to eyes, reversing within 7 days

**ammonium cumenesulphonate:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | Irritation to eyes, reversing within 21 days |

**calcium dodecylbenzene sulphonate:**

| | | |
|---|---|---|
| Result | : | Risk of serious damage to eyes. |

**amines, coco alkyl, ethoxylated:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | Irritation to eyes, reversing within 21 days |

**2-methylpropan-1-ol:**

| | | |
|---|---|---|
| Result | : | Risk of serious damage to eyes. |

**toluene:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |

**Respiratory or skin sensitization**

**Skin sensitization**

May cause an allergic skin reaction.

**Respiratory sensitization**

No applicable information is available

**Product:**

| | | |
|---|---|---|
| Test Type | : | Buehler Test |
| Species | : | Guinea pig |
| Result | : | May cause sensitization by skin contact. |
| Remarks | : | Based on data from similar materials |

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Result | : | The product is a skin sensitizer, sub-category 1B. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Result | : | Does not cause skin sensitization. |

**2-methylpropan-1-ol:**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Result | : | Does not cause skin sensitization. |
| Remarks | : | Information given is based on data obtained from similar substances. |

**toluene:**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Result | : | Does not cause skin sensitization. |

**Germ cell mutagenicity**

No applicable information is available

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Germ cell mutagenicity - Assessment | : | Animal testing did not show any mutagenic effects. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Germ cell mutagenicity - Assessment | : | Animal testing did not show any mutagenic effects. |

**toluene:**

| | | |
|---|---|---|
| Germ cell mutagenicity - Assessment | : | Animal testing did not show any mutagenic effects. |

**Carcinogenicity**

Suspected of causing cancer.

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | Weight of evidence does not support classification as a carcinogen |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | Weight of evidence does not support classification as a carcinogen |

**naphthalene:**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | Limited evidence of carcinogenicity in animal studies |

**toluene:**

| | | |
|---|---|---|
| Carcinogenicity - Assessment | : | No evidence of carcinogenicity in animal studies. |

| | | |
|---|---|---|
| **IARC** | **Group 2B: Possibly carcinogenic to humans** | |
| | naphthalene | 91-20-3 |
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. | |
| **NTP** | **Reasonably anticipated to be a human carcinogen** | |
| | naphthalene | 91-20-3 |

**Reproductive toxicity**

Suspected of damaging the unborn child.

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | Some evidence of adverse effects on development, based on animal experiments. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | No toxicity to reproduction |

**toluene:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | Some evidence of adverse effects on development, based on animal experiments. |

**STOT-single exposure**

May cause drowsiness or dizziness.
Corrosive to the respiratory tract.

**Components:**

**hydrocarbons, C10, aromatics, < 1% naphthalene:**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. |

**propiconazole (ISO):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, single exposure. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, single exposure. |

**2-methylpropan-1-ol:**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. |

**toluene:**

| | | |
|---|---|---|
| Routes of exposure | : | Inhalation |
| Assessment | : | The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. |

**STOT-repeated exposure**

No applicable information is available

**Components:**

**propiconazole (ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**difenoconazole (ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**toluene:**

Target Organs : Central nervous system
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**Components:**

**hydrocarbons, C10, aromatics, < 1% naphthalene:**

May be fatal if swallowed and enters airways.

**2-methylpropan-1-ol:**

May be harmful if swallowed and enters airways.

**toluene:**

May be fatal if swallowed and enters airways.

**Endocrine disrupting properties**

**Components:**

**propiconazole (ISO):**

Assessment : Does not have endocrine disrupting properties.

**difenoconazole (ISO):**

Assessment : Does not have endocrine disrupting properties.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**hydrocarbons, C10, aromatics, < 1% naphthalene:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
Exposure time: 96 h
Remarks: Information given is based on data obtained from

similar substances.

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EL50 (Daphnia magna (Water flea)): 3 - 10 mg/l<br>Exposure time: 48 h<br>Remarks: Information given is based on data obtained from similar substances. |
| Toxicity to algae/aquatic plants | : | EL50 (Raphidocelis subcapitata (freshwater green alga)): > 1 - < 3 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br>Remarks: Information given is based on data obtained from similar substances. |

**propiconazole (ISO):**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 4.3 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Americamysis): 0.51 mg/l<br>Exposure time: 96 h |
| Toxicity to algae/aquatic plants | : | ErC50 (Raphidocelis subcapitata (freshwater green alga)): 8.9 mg/l<br>Exposure time: 96 h<br><br>EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.96 mg/l<br>End point: Growth rate<br>Exposure time: 72 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Cyprinodon variegatus (sheepshead minnow)): 0.068 mg/l<br>Exposure time: 95 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Americamysis): 0.11 mg/l<br>Exposure time: 28 d |
| Toxicity to microorganisms | : | EC50 (activated sludge): > 100 mg/l<br>Exposure time: 3 h |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 1.1 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.77 mg/l<br>Exposure time: 48 h<br><br>EC50 (Americamysis): 0.15 mg/l<br>Exposure time: 96 h |
| Toxicity to algae/aquatic plants | : | EC10 (Navicula pelliculosa (Freshwater diatom)): 0.0697 mg/l<br>End point: Growth rate<br>Exposure time: 72 h |

ErC50 (Desmodesmus subspicatus (green algae)): 0.0876 mg/l
Exposure time: 72 h

EC10 (Desmodesmus subspicatus (green algae)): 0.015 mg/l
End point: Growth rate
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : EC10 (Pimephales promelas (fathead minnow)): 0.01298 mg/l
Exposure time: 34 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): 0.0078 mg/l
Exposure time: 21 d

EC10 (Americamysis): 0.00572 mg/l
Exposure time: 28 d

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h

**calcium dodecylbenzene sulphonate:**

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

**amines, coco alkyl, ethoxylated:**

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**2-methylpropan-1-ol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 1,430 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 1,100 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Raphidocelis subcapitata (freshwater green alga)): 1,799 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 20 mg/l
Exposure time: 21 d

**naphthalene:**

**Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**toluene:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l<br>Exposure time: 48 h |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l<br>Exposure time: 40 d |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Ceriodaphnia dubia (Water flea)): 0.74 mg/l<br>Exposure time: 7 d |

**Persistence and degradability**

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Biodegradability | : | Result: Not readily biodegradable. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Biodegradability | : | Result: Not readily biodegradable. |
| Stability in water | : | Degradation half life: 1 d<br>Remarks: Product is not persistent. |

**2-methylpropan-1-ol:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable. |

**toluene:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable. |

**Bioaccumulative potential**

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Bioaccumulation | : | Remarks: Medium bioaccumulation potential. |
| Partition coefficient: n-octanol/water | : | log Pow: 3.72 (77 °F / 25 °C) |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Bioaccumulation | : | Remarks: Does not bioaccumulate. |
| Partition coefficient: n-octanol/water | : | log Pow: 4.4 (77 °F / 25 °C) |

**toluene:**

| | | |
|---|---|---|
| Bioaccumulation | : | Remarks: Does not bioaccumulate. |

**Mobility in soil**

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Distribution among environmental compartments | : | Remarks: Low mobility in soil. |
| Stability in soil | : | Dissipation time: 66 - 170 d<br>Percentage dissipation: 50 % (DT50)<br>Remarks: Product is not persistent. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Distribution among environmental compartments | : | Remarks: Slightly mobile in soils |
| Stability in soil | : | Dissipation time: 122 d<br>Percentage dissipation: 50 % (DT50)<br>Remarks: Product is not persistent. |

**Other adverse effects**

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Not persistent, bioaccumulative, and toxic (PBT). |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Not persistent, bioaccumulative, and toxic (PBT). |

**2-methylpropan-1-ol:**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Not persistent, bioaccumulative, and toxic (PBT). |

**naphthalene:**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Not persistent, bioaccumulative, and toxic (PBT). |

**toluene:**

| | | |
|---|---|---|
| Results of PBT and vPvB assessment | : | Not persistent, bioaccumulative, and toxic (PBT). |

**Endocrine disrupting properties**

**Components:**

**propiconazole (ISO):**

| | | |
|---|---|---|
| Assessment | : | Does not have endocrine disrupting properties. |

**difenoconazole (ISO):**

| | | |
|---|---|---|
| Assessment | : | Does not have endocrine disrupting properties. |

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | Do not contaminate ponds, waterways or ditches with chemical or used container. |

| | | |
|---|---|---|
| | | Do not dispose of waste into sewer.<br>Where possible recycling is preferred to disposal or incineration.<br>If recycling is not practicable, dispose of in compliance with local regulations.<br>This product will not be classified as a RCRA characteristic hazardous waste when discarded. |
| Contaminated packaging | : | Empty remaining contents.<br>Triple rinse containers.<br>Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>Do not re-use empty containers. |

## SECTION 14. TRANSPORT INFORMATION

### International Regulations

**UNRTDG**

| | | |
|---|---|---|
| UN number | : | UN 3082 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(PROPICONAZOLE, DIFENOCONAZOLE) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| Environmentally hazardous | : | yes |
| Remarks | : | This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids. |

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 3082 |
| Proper shipping name | : | Environmentally hazardous substance, liquid, n.o.s.<br>(PROPICONAZOLE, DIFENOCONAZOLE) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous |
| Packing instruction (cargo aircraft) | : | 964 |
| Packing instruction (passenger aircraft) | : | 964 |
| Environmentally hazardous | : | yes |
| Remarks | : | This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids. |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 3082 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(PROPICONAZOLE, DIFENOCONAZOLE) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |

| | | |
|---|---|---|
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |
| Remarks | : | This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids. |

**Transport in bulk according to IMO instruments**

Not applicable for product as supplied.

**Domestic regulation**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | NA 1993 |
| Proper shipping name | : | Combustible liquid, n.o.s. (ISOBUTANOL, SOLVENT NAPHTHA) |
| Class | : | Combustible liquid. |
| Packing group | : | III |
| Labels | : | NONE |
| ERG Code | : | 128 |
| Marine pollutant | : | no |
| Remarks | : | Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters). |

**Special precautions for user**

| | | |
|---|---|---|
| Remarks | : | 49CFR: no dangerous good in non-bulk packaging |

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:
Danger
Corrosive
Causes irreversible eye damage.
Causes skin irritation.
Do not get in eyes, on skin, or on clothing.
Harmful if swallowed.
Harmful if absorbed through skin.
Wear appropriate protective eyewear such as goggles
Wear appropriate protective eyewear such as face shield.
Wear appropriate protective eyewear such as safety glasses.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
Remove and wash contaminated clothing before re-use.

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| naphthalene | 91-20-3 | 100 | 26954 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)
Respiratory or skin sensitization
Carcinogenicity
Reproductive toxicity
Aspiration hazard
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| propiconazole (ISO) | 60207-90-1 | >= 20 - < 30 % |
| naphthalene | 91-20-3 | >= 0.1 - < 1 % |

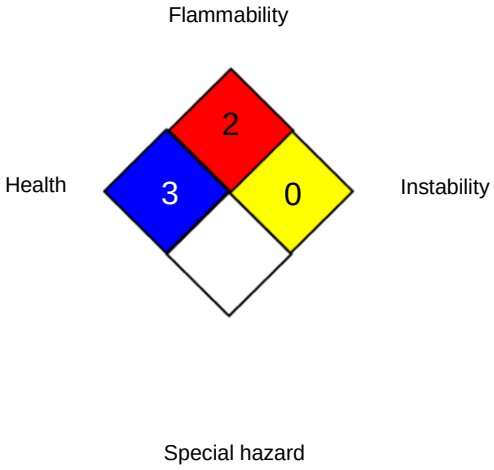
**California Prop. 65**

WARNING: This product can expose you to chemicals including naphthalene, which is/are known to the State of California to cause cancer, and toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

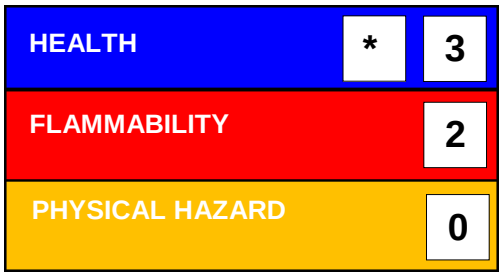
## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA 704:**




**HMIS® IV / CED:**




HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH BEI | : | ACGIH - Biological Exposure Indices (BEI) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| OSHA Z-2 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| Syngenta | : | Syngenta Occupational Exposure Limits |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST | : | STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA P0 / STEL | : | Short-term exposure limit |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-2 / TWA | : | 8-hour time weighted average |
| OSHA Z-2 / CEIL | : | Acceptable ceiling concentration |
| OSHA Z-2 / Peak | : | Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift |
| Syngenta / TWA | : | Time weighted average |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport

Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 09/10/2026

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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