# Tern® 750EC

syngenta®

**GROUP 5 FUNGICIDE**

TERN® 750EC is an emulsifiable concentrate containing 750 g/l (81.8 %w/w) fenpropidin.

TERN® 750EC provides moderate control of powdery mildew on winter wheat, spring wheat, winter barley, spring barley, oats, rye and tritcale.

**FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE**

**In case of toxic or transport emergency ring +44 (0) 538444 anytime (24hr)**

**PLEASE SEE ACCOMPANYING LEAFLET FOR PRODUCT USE DETAILS**

PROTECT FROM FROST
SHAKE WELL BEFORE USE

**1 Litre**

5 391513 810213

L1089936 IREL/06A PPE 4163255

**FOR PROFESSIONAL USE ONLY**

**To avoid risks to human health and the environment comply with the instructions for use.**
TERN® 750EC is an emulsifiable concentrate containing 750 g/l (81.8% w/w) fenpropidin.

**Warning.**
**Harmful if swallowed or inhaled.**
**Causes serious eye irritation.**
**May cause respiratory irritation.**
**May cause damage to organs through prolonged or repeated exposure.**
**Very toxic to aquatic life with long lasting effects.**

Keep out of reach of children.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/
eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTRE or doctor/physician if you feel unwell.
If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a a POISON CENTRE/doctor if you feel unwell.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty clean containers which can be disposed of as non-hazardous waste.
To protect aquatic organisms respect an unsprayed buffer zone of 15m to surface water bodies.
Contains fenpropidin. May produce an allergic reaction.

**PCS No.** 04305

| Authorisation Holder | Marketing Company |
|---|---|
| Syngenta UK Limited<br>CPC4, Capital Park, Fulbourn,<br>Cambridge, CB21 5XE<br>Tel: +44 (0) 1223 883400 | Syngenta Ireland Limited<br>Block 6, Cleaboy Business Park,<br>Old Kilmeaden Road, Waterford.<br>Tel: (051) 377203 |



L1089936 IREL/06A PPE 4163255

TERN® 750EC provides moderate control of powdery mildew on winter wheat, spring wheat, winter barley, spring barley, oats, rye and tritcale.

**CONDITIONS FOR USE**
FOR USE AS AN AGRICULTURAL FUNGICIDE

| CROP | Max. single dose (litres/hectare/crop) | Max. no of applications | Max. total dose (litres/hectare/crop) | Latest time of application |
|---|---|---|---|---|
| Winter wheat, spring wheat, durum wheat, winter barley, spring barley, oats, rye and triticale. | 0.5 | - | 1.0 | Before beginning of flowering: first anthers visible (GS 61). |

**Additional Safety Information.**
**Operator protection**
Wash splashes from skin and eyes immediately.
Wash hands and exposed skin before meals and after work.
Harmful to Livestock. Keep livestock out of treated areas for at least 7 day.
Wear suitable protective clothing, gloves and eye/face protection.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Do not breathe spray.
**Storage and disposal.**
Keep in original container, tightly closed in a safe place.
Wash out containers thoroughly, preferably using an integrated pressure rinsing device, or manually rinse three times. Add washings to the sprayer at the time of filling. Complete filling to the required volume and continue to agitate throughout the spraying operation.
**Restrictions**
Do not apply more than 3 times to any one crop.
TERN 750EC should only be used up to full the ear emergence (GS 59) stage on all crops.
Disease control may be reduced if strains of the pathogen less sensitive to TERN 750EC develop.

**DIRECTIONS FOR USE**
IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

**CROPS**
TERN 750EC can be used on all varieties of winter wheat, spring wheat, winter barley, spring barley, oats, rye and tritcale.

**DISEASE CONTROL**
For moderate control of powdery mildew apply during the early stages of disease development. Best results will be achieved when not more than 5% of the third leaf from the top of the plant is infected. A repeat spray may be necessary during prolonged or severe attacks.

**APPLICATION RATE**
Apply TERN 750EC at 05. litres per hectare.

**MIXING AND SPRAYING**
Make sure the sprayer is set to give an even application at the correct volume.
Fill the sprayer tank with half the required quantity of clean water and begin agitation. Add the required quantity of TERN 750EC and continue agitation whilst adding the rest of the water. Agitate the mixture thoroughly before use and continue agitation during spraying.
Thoroughly wash all spray equipment with water immediately after use.

**APPLICATION**
**Volume**
Apply TERN 750EC in a recommended of 200 litres of water per hectare.

**COMPATIBILITY**
The following products may be tank-mixed with TERN 750EC provided the timing is correct for both TERN 750EC and the partner in the mixture.
The products should be added separately to the bulk of the water in the spray tank. Continuous agitation should be maintained and the products used immediately after mixing.

**Fungicides**
BRAVO 500

**Herbicides**
Approved salt formulations of:
MCPA
Mecoprop

**Growth Regulators**
Approved formulations containing chlormequat or chlormequat and choline chloride.

For further information on compatibility, contact Syngenta Ireland Ltd.

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

**1.1 Product Identifier**
**Product Name:** TERN 750 EC
**Design Code:** A7516D
**Product Registration Number:** PCS 04305
**1.2 Relevant Identified Uses of the substance or mixture and uses advised against**
Use of the Substance/Mixture: Fungicide
**1.3 Details of the supplier of the safety data sheet**
**Company:** Syngenta Ireland Limited
Block 6 Cleaboy Business Park, Old Kilmeaden Road, Waterford, Ireland
**Phone:** (051) 377203
**Fax:** (051) 354748
**E-mail address of person responsible for the SDS:** cropsales.ie@syngenta.com
**1.4 Emergency telephone number**
**Emergency phone No.:** +44 (0) 1484 538444

## SECTION 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture**
**Classification (REGULATION (EC) No 1272/2008)**
Acute toxicity, Category 4 - H302: Harmful if swallowed.
Acute toxicity, Category 4 - H332: Harmful if inhaled.
Eye irritation, Category 2 - H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Respiratory system - H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2 - H373: May cause damage to organs through prolonged or repeated exposure.
Short-term (acute) aquatic hazard, Category 1 - H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1 - H410: Very toxic to aquatic life with long lasting effects.
**2.2 Label elements**
**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms

| | | |
|---|---|---|
| Signal Word | Warning | |
| Hazard Statements | H302+H352 | Harmful if swallowed or if inhaled. |
| | H319 | Causes serious eye irritation. |
| | H335 | May cause respiratory irritation. |
| | H373 | May cause damage to organs through prolonged or repeated exposure. |
| | H410 | Very toxic to aquatic life with long lasting effects. |
| Supplemental Hazard Statements | EUH401 | To avoid risks to human health and the environment comply with the instructions for use. |
| | EUH208 | Contains fenpropidin. May produce an allergic reaction. |
| Precautionary Statements | P102 | Keep out of reach of children. |
| | P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| | P304+P340 +P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| | P314 | Get medical advice/ attention if you feel unwell. |
| | P305+P351 +P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P337+P313 | If eye irritation persists: Get medical advice/ attention. |
| | P312 | Call a POISON CENTER or doctor/ physician if you feel unwell. |
| | P391 | Collect spillage. |
| | P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| | P501 | Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste. |

**2.3 Other hazards**
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

**3.2 Mixtures**
**Components**

| Chemical Name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| fenpropidin | 67306-00-7 | Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Eye Dam. 1; H318<br>Skin Sens. 1B; H317<br>STOT SE 3; H335<br>STOT RE 2; H373<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410 | >= 70 - < 90 |

| Chemical Name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| Solvent naphtha (petroleum), heavy arom.; Kerosine -unspecified | 64742-94-5<br>265-198-5<br>649-424-00-3<br>01-2119463583-34 | Asp. Tox.1; H304<br>Aquatic Chronic2; H411 | >= 2.5 - < 10 |
| 2-[2-(2-{2-[2-(11-methyl-dodecyloxy)-ethoxy]-ethoxy}-ethoxy)-ethoxy]-ethanol | 78330-21-9<br><br>500-027-2 | Eye Dam.1; H318<br>Aquatic Acute 1; H400<br>Aquatic Chronic 3; H412 | >= 3 - < 10 |
| calcium dodecylbenzenesulphonate | 26264-06-2<br>247-557-8 | Skin Irrit. 2; H315<br>Eye Dam. 1; H318<br>Aquatic Chronic 3; H412 | >= 1 - < 2.5 |

For explanation of abbreviations see section 16.

## SECTION 4. FIRST-AID MEASURES

**4.1 Description of first aid measures**

**General Advice:** Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.

**Inhalation:** Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

**Skin Contact:** Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting: contains petroleum distillates and/or aromatic solvents.

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

Symptoms: Aspiration may cause pulmonary oedema and pneumonitis.

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

**Medical advice:** There is no specific antidote available. Treat symptomatically. Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.

## SECTION 5. FIRE-FIGHTING MEASURES

**5.1 Extinguishing media**

Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires

Use alcohol-resistant foam or water spray.

Do not use a solid water stream as it may scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture**

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

**5.3 Advice for fire-fighters**

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**

Refer to protective measures listed in sections 7 and 8.

**6.2 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.

**6.3 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.

**6.4 Reference to other sections**

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

Refer to disposal considerations listed in section 13.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**

No special protective measures against fire required. Avoid contact with skin and eyes. When using, do not eat, drink or smoke. For personal protection see section 8.

**7.2 Conditions for safe storage, including any incompatibilities**

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

**7.3 Specific end use(s)**

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| fenpropidin | 67306-00-7 | TWA | 5 mg/m³ | Syngenta |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified | 64742-94-5 | TWA | 100 mg/m³ | Supplier |

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|---|---|---|---|---|
| calcium dodecylbenzenesulphonate | Workers | Dermal | Long-term systemic effects | 1.7 mg/kg |
| | Consumers | Dermal | Acute systemic effects | 85 mg/kg |
| | Consumers | Oral | Long-term local effects | 89 mg/kg |
| Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified | Consumers | Oral | Acute effects | 7.5 mg/kg |
| | Workers | Dermal | Long-term exposure | 12.5 mg/kg |
| | Consumers | Dermal | Long-term exposure | 7.5 mg/kg |
| | Consumers | Inhalation | Long-term exposure | 151 mg/m³ |
| | Workers | Inhalation | Long-term exposure | 32 mg/m³ |

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

| Substance name | Environmental Compartment | Value |
|---|---|---|
| calcium dodecylbenzenesulphonate | Fresh water | 0.023 mg/l |
| | Marine water | 0.0023 mg/l |
| | Intermittent use/release | 0.01 mg/l |
| | Fresh water sediment | 0.174 mg/kg |
| | Marine sediment | 0.0174 mg/kg |
| | Sewage treatment plant | 3 mg/kg |
| | Soil | 0.62mg/kg |

### 8.2 Exposure controls

**Engineering Measures:** 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. If airborne mist or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

**Personal protective equipment**

Eye protection: Tightly fitting safety goggles
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.
Use eye protection according to EN 166.
Hand protection
Material: Nitrile rubber
Break through time: > 480 min
Glove thickness: 0.5 mm
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 on 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.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
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
Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Suitable respiratory equipment: Respirator with combination filter for vapour/particulate (EN 141)
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.
Filter type: Combined particulates and organic vapour type (A-P)
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

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance:** | Liquid |
| **Colour:** | Yellow to brownish |
| **Odour:** | Characteristic |
| **Odour Threshold:** | No data available |
| **pH:** | 8 - 12<br>Concentration: 1 % w/v |
| **Melting point/range:** | No data available |
| **Boiling point/boiling range:** | > 170 °C |
| **Flash point:** | 71.5 °C (1,013 hPa) |
| **Evaporation rate:** | No data available |
| **Flammability (solid, gas):** | No data available |
| **Lower explosion limit:** | No data available |
| **Upper explosion limit:** | No data available |
| **Vapour pressure:** | No data available |

| | |
|---|---|
| **Relative vapour density:** | No data available |
| **Density:** | 0.917 g/cm³ (20 °C) |
| **Solubility in other solvents:** | No data available |
| **Partition Coefficient n-octanol/water:** | No data available |
| **Autoignition temperature:** | 260 °C |
| **Thermal decomposition:** | No data available |
| **Viscosity, dynamic:** | 30.5 mP.a.s (20 °C)<br>11.5 mP.a.s (40 °C) |
| **Explosive properties:** | Not explosive |
| **Oxidizing properties:** | The substance or mixture is not classified as oxidizing. |

**9.2 Other Information**

| | |
|---|---|
| **Surface tension:** | 31.0 mN/m, 25 °C |

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:**
None reasonably foreseeable.
**10.2 Chemical stability**
Stable under normal conditions.
**10.3 Possibility of hazardous reactions**
Hazardous reactions: No dangerous reaction known under conditions of normal use.
**10.4 Conditions to avoid**
Conditions to avoid: No decomposition if used as directed.
**10.5 Incompatible materials**
Materials to avoid: None known.
**10.6 Hazardous decomposition products**
Hazardous decomposition products: No hazardous decomposition products are known.

## SECTION 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**
Information on likely routes of exposure: Ingestion, Inhalation, Skin contact, Eye contact
**Acute toxicity**
**Product:**

| | |
|---|---|
| Acute oral toxicity: | LD50 (Rat, male and female): 200 - 2,000 mg/kg<br>Assessment: The component/mixture is moderately toxic after single ingestion.<br>Remarks: The toxicological data has been taken from products of similar composition. |
| Acute inhalation toxicity: | LC50 (Rat, male and female): 1.5 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Remarks: Derived from components. |
| Acute dermal toxicity: | LD50 (Rat, male and female): > 2,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity<br>Remarks: The toxicological data has been taken from products of similar composition. |

**Components:**
**fenpropidin:**

| | |
|---|---|
| Acute oral toxicity: | LD50 (Rat, male and female): 2,009 mg/kg<br>LD50 (Rat, male): 2,173 mg/kg<br>LD50 (Rat, female): 1,452 mg/kg |
| Acute inhalation toxicity: | LC50 (Rat, male and female): 1.22 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations. |
| Acute dermal toxicity: | LD50 (Rat, male and female): > 4,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Skin corrosion/irritation**
**Product:**
Species: Rabbit
Result: No skin irritation
Remarks: The toxicological data has been taken from products of similar composition.
**Components:**
**fenpropidin:**
Species: Rabbit
Result: Mild skin irritation
**calcium dodecylbenzenesulphonate:**
Result: Irritating to skin.
**Serious eye damage/eye irritation**
**Product:**
Species: Rabbit
Result: Eye irritation
Remarks: The toxicological data has been taken from products of similar composition.
**Components:**
**fenpropidin:**
Species: Rabbit
Result: Risk of serious damage to eyes.
**2-[2-(2-{2-[2-(11-methyl-dodecyloxy)-ethoxy]-ethoxy}-ethoxy)-ethoxy]-ethanol:**
Species: Rabbit
Result: Irreversible effects on the eye
**calcium dodecylbenzenesulphonate:**
Result: Irreversible effects on the eye
**Respiratory or skin sensitisation**
**Product:**
Test Type: Maximisation Test
Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.
Remarks: The toxicological data has been taken from products of similar composition.

**Components:**

**fenpropidin:**

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

**Germ cell mutagenicity**

**Components:**

**fenpropidin:**

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

**Carcinogenicity**

**Components:**

**fenpropidin:**

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

**Reproductive toxicity**

**Components:**

**fenpropidin:**

Reproductive toxicity - Assessment: No toxicity to reproduction

**STOT - single exposure**

**Components:**

**fenpropidin:**

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

**STOT - repeated exposure**

**Components:**

**fenpropidin:**

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

**Aspiration toxicity**

**Components:**

**Solvent naphtha (petroleum), heavy arom.; Kerosine -unspecified:**

May be fatal if swallowed and enters airways.

---

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Product:**

| | |
|---|---|
| Toxicity to fish: | LC50 (*Oncorhynchus mykiss* (rainbow trout)): 3.91 mg/l<br>Exposure time: 96 h<br>Remarks: Based on test results obtained with similar product. |
| Toxicity to daphnia and other aquatic invertebrates: | EC50 (*Daphnia magna* (Water flea)): 0.90 mg/l<br>Exposure time: 48 h<br>Remarks: Based on test results obtained with similar product. |
| Toxicity to algae: | ErC50 (*Desmodesmus subspicatus* (green algae)): 0.0004 mg/l<br>Exposure time: 72 h<br>Remarks: Based on test results obtained with similar product.<br>EbC50 (*Desmodesmus subspicatus* (green algae)): 0.0002 mg/l<br>Exposure time: 72 h<br>Remarks: Based on test results obtained with similar product. |

**Components:**

**fenpropidin:**

| | |
|---|---|
| Toxicity to fish: | LC50 (*Oncorhynchus mykiss* (rainbow trout)): 2.57 mg/l<br>Exposure time: 96 h<br>LC50 (*Lepomis macrochirus* (Bluegill sunfish)): 1.93 mg/l<br>Exposure time: 96 h<br>LC50 (*Cyprinus carpio* (Carp)): 3.55 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates: | EC50 (*Daphnia magna* (Water flea)): 0.54 mg/l<br>Exposure time: 48 h |
| Toxicity to algae: | ErC50 (*Desmodesmus subspicatus* (green algae)): > 0.001 mg/l<br>Exposure time: 72 h<br>NOEC (*Desmodesmus subspicatus* (green algae)): 0.000032 mg/l<br>End point: Growth rate<br>Exposure time: 72 h |
| M-Factor (Acute aquatic toxicity): | 100 |
| Toxicity to fish (Chronic toxicity): | NOEC: 0.32 mg/l<br>Exposure time: 21 d<br>Species: *Oncorhynchus mykiss* (rainbow trout) |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): | NOEC: 1.0 mg/l<br>Exposure time: 21 d<br>Species: *Daphnia magna* (Water flea) |
| M-Factor (Chronic aquatic toxicity): | 1,000 |

**Solvent naphtha (petroleum), heavy arom.; Kerosine -unspecified:**

**Ecotoxicology Assessment**

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

**2-[2-(2-{2-[2-(11-methyl-dodecyloxy)-ethoxy]-ethoxy}-ethoxy)-ethoxy]-ethanol:**

Toxicity to fish: LC50 (*Danio rerio* (zebra fish)): 1 - 10 mg/l
Exposure time: 96 h

**Ecotoxicology Assessment**

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

**calcium dodecylbenzenesulphonate:**
**Ecotoxicology Assessment**
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.
**12.2 Persistence and degradability**
**Components:**
**fenpropidin:**
Biodegradability: Result: Inherently biodegradable.
Stability in water: Remarks: Product is not persistent.
**2-[2-(2-{2-[2-(11-methyl-dodecyloxy)-ethoxy]-ethoxy}-ethoxy)-ethoxy]-ethanol:**
Biodegradability: Result: Readily biodegradable.
**12.3 Bioaccumulative potential**
**Components:**
**fenpropidin:**
Bioaccumulation: Remarks: Does not bioaccumulate.
Partition coefficient: n-octanol/water: log Pow: 2.9 (25 °C)
**12.4 Mobility in soil**
**Components:**
**fenpropidin:**
Distribution among environmental compartments: Remarks: immobile
Stability in soil: Remarks: Product is not persistent.
**12.5 Results of PBT and vPvB assessment**
**Product:**
Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
**Components:**
**fenpropidin:**
Assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
**2-[2-(2-{2-[2-(11-methyl-dodecyloxy)-ethoxy]-ethoxy}-ethoxy)-ethoxy]-ethanol:**
Assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
**12.6 Other adverse effects**
No data available

---

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**
**Product:** Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
**Contaminated packaging:** Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.
**Waste Code:** 150110, packaging containing residues of or contaminated by dangerous substances

---

## SECTION 14. TRANSPORT INFORMATION

**Land transport** (ADR/RID)
**14.1 UN number**
ADN: UN 3082
ADR: UN 3082
RID: UN 3082
IMDG: UN 3082
IATA: UN 3082
**14.2 UN proper shipping name**
ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA AND FENPROPIDIN)
ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA AND FENPROPIDIN)
RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA AND FENPROPIDIN)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SOLVENT NAPHTHA AND FENPROPIDIN)
IATA: Environmentally hazardous substance, liquid, n.o.s. (SOLVENT NAPHTHA AND FENPROPIDIN)
**14.3 Transport hazard class(es)**
ADN: 9
ADR: 9
RID: 9
IMDG: 9
IATA: 9
**14.4 Packing group**
ADN
Packing group: III
Classification Code: M6
Hazard Identification Number: 90
Labels: 9
ADR
Packing group: III
Classification Code: M6
Hazard Identification Number: 90
Labels: 9
Tunnel restriction code: (-)
RID
Packing group: III
Classification Code: M6
Hazard Identification Number: 90
Labels: 9
IMDG
Packing group: III
Labels: 9
EmS Code: F-A, S-F

IATA (Cargo)
Packing instruction (cargo aircraft): 964
Packing instruction (LQ): Y964
Packing group: III
Labels: Miscellaneous
IATA (Passenger)
Packing instruction (passenger aircraft): 964
Packing instruction (LQ): Y964
Packing group: III
Labels: Miscellaneous

**14.5 Environmental hazards**

ADN
Environmentally hazardous: yes
ADR
Environmentally hazardous: yes
RID
Environmentally hazardous: yes
IMDG
Marine pollutant: yes
IATA (Passenger)
Environmentally hazardous: yes
IATA (Cargo)
Environmentally hazardous: yes

**14.6 Special precautions for user**

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.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

---

**SECTION 15: Regulatory information**

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).: Not applicable
REACH - List of substances subject to authorisation (Annex XIV): Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Conditions of restriction for the following entries should be considered: Number on list 3
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

| | | Quantity 1 | Quantity 2 |
|---|---|---|---|
| E1 | ENVIRONMENTAL HAZARDS | 100 t | 200 t |
| 34 | Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d) | 2,500 t | 25,000 t |

**Other regulations:**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.
Use plant protection products safely. Always read the label and product information before use.

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

---

**16. OTHER INFORMATION**

**Full text of H-Statements**

H302: Harmful if swallowed.
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.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

Acute Tox.: Acute toxicity
Aquatic Acute: Acute aquatic toxicity
Aquatic Chronic: Chronic aquatic toxicity
Asp. Tox.: Aspiration hazard
Eye Dam.: Serious eye damage
Skin Irrit.: Skin irritation
Skin Sens.: Skin sensitisation
STOT RE: Specific target organ toxicity - repeated exposure
STOT SE: Specific target organ toxicity - single exposure

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; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regula-tion; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Cana-da); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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 Organisation 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance 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

**Further information**

| **Classification of the mixture:** | | **Classification procedure:** |
|---|---|---|
| Acute Tox. 4 | H302 | Based on product data or assessment |
| Acute Tox. 4 | H332 | Based on product data or assessment |
| Eye Irrit. 2 | H319 | Based on product data or assessment |
| STOT SE 3 | H335 | Calculation method |
| STOT RE 2 | H373 | Calculation method |
| Aquatic Acute 1 | H400 | Based on product data or assessment |
| Aquatic Chronic 1 | H410 | Calculation method |

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.