SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name : Pirimiphos-Methyl / Lambda-Cyhalothrin Formulation

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use of the Substance/Mixture : Veterinary product

1.3 Details of the supplier of the safety data sheet
Company : MSD
Walton Manor, Walton
MK7 7AJ Milton Keynes - United Kingdom

Telephone : 908-740-4000
Telefax : 908-735-1496
E-mail address of person responsible for the SDS : EHSDATASTEWARD@msd.com

1.4 Emergency telephone number
1-908-423-6000

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 3 : H331: Toxic if inhaled.
Skin irritation, Category 2 : H315: Causes skin irritation.
Eye irritation, Category 2 : H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 1 : H370: Causes damage to organs.
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 : Danger
Pirimiphos-Methyl / Lambda-Cyhalothrin Formulation

Hazard statements:
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:
- Prevention:
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves/ eye protection/ face protection.
- Response:
  - P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.
  - P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.
  - P337 + P313 If eye irritation persists: Get medical advice/ attention.
  - P391 Collect spillage.

Hazardous components which must be listed on the label:
- Pirimiphos-methyl (ISO)
- Lambda-cyhalothrin (ISO)

2.3 Other hazards
None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pirimiphos-methyl</td>
<td>29232-93-7</td>
<td>249-526-5</td>
<td>015-134-00-5</td>
<td></td>
<td>Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 1; H370 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1,000</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
</tbody>
</table>

Date of last issue: 24.04.2019
Date of first issue: 09.01.2017
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according to Regulation (EC) No. 1907/2006

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</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
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<td>09.01.2017</td>
</tr>
</tbody>
</table>

| M-Factor (Chronic aquatic toxicity): 100 | Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Eye Irrit. 2; H319 STOT SE 1; H370 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 | >= 2.5 - < 10 |
| lambda-cyhalothrin (ISO) | 91465-08-6 415-130-7 607-252-00-6 | M-Factor (Acute aquatic toxicity): 10,000 M-Factor (Chronic aquatic toxicity): 10,000 |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

Protection of first-aiders: First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

If inhaled: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.

If swallowed: If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.
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Get medical attention.
Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed
Risks: Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Toxic if inhaled.
Causes damage to organs.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media:
Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: Exposure to combustion products may be a hazard to health.

Hazardous combustion products:
Carbon oxides
Nitrogen oxides (NOx)
Chlorine compounds
Fluorine compounds

5.3 Advice for firefighters
Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Specific extinguishing methods:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions
Environmental precautions: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections
See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Technical measures: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation: If sufficient ventilation is unavailable, use with local exhaust ventilation.
Advice on safe handling: Do not get on skin or clothing.
Do not swallow.
Do not get in eyes.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
Keep container tightly closed.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.
The effective operation of a facility should include review of
engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations.

Advice on common storage: Do not store with the following product types:
Strong oxidizing agents
Organic peroxides
Explosives
Gases

7.3 Specific end use(s)
Specific use(s): No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>polyvinyl chloride</td>
<td>9002-86-2</td>
<td>TWA (inhalable dust)</td>
<td>10 mg/m3</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols. The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit
8.2 Exposure controls

**Engineering measures**
All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.
Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).
Minimize open handling.

**Personal protective equipment**

**Eye protection**
- Wear safety glasses with side shields or goggles.
- If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
- Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

**Hand protection**
- Material: Chemical-resistant gloves
- Remarks: Consider double gloving.

**Skin and body protection**
- Work uniform or laboratory coat.
- Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.
- Use appropriate degowning techniques to remove potentially contaminated clothing.

**Respiratory protection**
- If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
- Filter type: Particulates type (P)

### SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

- **Appearance**: solid
- **Colour**: No data available
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Odour: characteristic
Odour Threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: Not applicable
Evaporation rate: No data available
Flammability (solid, gas): Not classified as a flammability hazard
Upper explosion limit / Upper flammability limit: No data available
Lower explosion limit / Lower flammability limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Relative density: No data available
Density: No data available
Solubility(ies)
  Water solubility: insoluble
  Partition coefficient: n-octanol/water: No data available
  Auto-ignition temperature: No data available
  Decomposition temperature: No data available

Viscosity
  Viscosity, kinematic: No data available

Explosive properties: Not explosive
Oxidizing properties: The substance or mixture is not classified as oxidizing.

9.2 Other information
Flammability (liquids): No data available
Molecular weight: No data available
Particle size: No data available
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SECTION 10: Stability and reactivity

10.1 Reactivity
Not classified as a reactivity hazard.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: Can react with strong oxidizing agents.

10.4 Conditions to avoid
Conditions to avoid: None known.

10.5 Incompatible materials
Materials to avoid: Oxidizing agents

10.6 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:
- Skin contact
- Ingestion
- Eye contact

Acute toxicity
Harmful if swallowed.
Toxic if inhaled.

Product:
Acute oral toxicity: Acute toxicity estimate: 654.55 mg/kg
Method: Calculation method

Acute inhalation toxicity: Acute toxicity estimate: 0.7676 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity: Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:
Pirimiphos-methyl (ISO):
Acute oral toxicity: LD50 (Rat): 1,180 mg/kg
LD50 (Rat): 2,400 - 5,976 mg/kg
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LD50 (Mouse): > 575 mg/kg
LD50 (Dog): > 1,500 mg/kg

Acute inhalation toxicity
LC50 (Rat): > 5.04 mg/l
Exposure time: 4 h

Acute dermal toxicity
LD50 (Rabbit): 2,000 mg/kg
LD50 (Rat): > 4,592 mg/kg

Lambda-cyhalothrin (ISO):
Acute oral toxicity
LD50 (Rat): 56 - 79 mg/kg
LD50 (Mouse): 20 mg/kg

Acute inhalation toxicity
LC50 (Rat): 0.06 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity
LD50 (Rat): 632 - 696 mg/kg

Acute toxicity (other routes of administration)
LD50 (Rat): 250 - 750 mg/kg
Application Route: Intraperitoneal

Skin corrosion/irritation
Causes skin irritation.

Components:

Pirimiphos-methyl (ISO):
Species: Rabbit
Result: Irritating

Lambda-cyhalothrin (ISO):
Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation.

Components:

Pirimiphos-methyl (ISO):
Species: Rabbit
Result: Mild eye irritation

Lambda-cyhalothrin (ISO):
Species: Rabbit
Result : Mild eye irritation

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Components:

Pirimiphos-methyl (ISO):
Test Type : Maximisation Test
Exposure routes : Dermal
Species : Guinea pig
Result : Not a skin sensitizer.

lambda-cyhalothrin (ISO):
Test Type : Magnusson-Kligman-Test
Exposure routes : Dermal
Species : Guinea pig
Result : Not a skin sensitzer.

Germ cell mutagenicity
Not classified based on available information.

Components:

Pirimiphos-methyl (ISO):
Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: equivocal

Test Type: sister chromatid exchange assay
Result: positive

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Result: negative

lambda-cyhalothrin (ISO):
Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosomal aberration
Test system: Human lymphocytes
Result: negative
<table>
<thead>
<tr>
<th>Test Type: unscheduled DNA synthesis assay</th>
<th>Test system: rat hepatocytes</th>
<th>Result: negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Type: In vitro mammalian cell gene mutation test</td>
<td>Test system: mouse lymphoma cells</td>
<td>Result: negative</td>
</tr>
</tbody>
</table>

Genotoxicity in vivo:
Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Intraperitoneal
Result: negative

Carcinogenicity:
Not classified based on available information.

Components:

Pirimiphos-methyl (ISO):
Species: Rat
Application Route: Oral
Exposure time: 2 Years
Result: negative

Species: Mouse
Application Route: Oral
Exposure time: 80 weeks
Result: negative

Carcinogenicity - Assessment: Animal testing did not show any carcinogenic effects.

lambda-cyhalothrin (ISO):
Species: Mouse
Application Route: oral (feed)
Exposure time: 2 Years
Result: negative
Remarks: Based on data from similar materials

Species: Rat
Application Route: oral (feed)
Exposure time: 2 Years
Result: negative
Remarks: Based on data from similar materials

Reproductive toxicity:
Not classified based on available information.

Components:

Pirimiphos-methyl (ISO):
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Effects on fertility:
- Test Type: Two-generation reproduction toxicity study
- Species: Rat
- Application Route: Oral
- Fertility: NOAEL: 15.4 mg/kg body weight
- Result: No effects on fertility

Effects on foetal development:
- Test Type: Development
- Species: Rat
- Application Route: Oral
- Developmental Toxicity: NOAEL: 150 mg/kg body weight
- Result: No effects on early embryonic development
- Remarks: Maternal toxicity observed.

Lambda-cyhalothrin (ISO):
- Test Type: Three-generation study
- Species: Rat
- Application Route: Oral (feed)
- General Toxicity - Parent: NOAEL: 2 mg/kg body weight
- General Toxicity F1: LOAEL: 6.7 mg/kg body weight
- Symptoms: Reduced offspring weight gain
- Result: No effects on fertility
- Remarks: Based on data from similar materials

STOT - single exposure
Causes damage to organs.
Components:

Pirimiphos-methyl (ISO):
Target Organs: Central nervous system
Assessment: Causes damage to organs.

lambda-cyhalothrin (ISO):
Target Organs: Nervous system
Assessment: Causes damage to organs.

STOT - repeated exposure
Not classified based on available information.

Components:

Pirimiphos-methyl (ISO):
Remarks: Not classified due to inconclusive data.

Repeated dose toxicity

Components:

Pirimiphos-methyl (ISO):
Species: Rat
NOAEL: 0.5 mg/kg
LOAEL: 2.5 mg/kg
Application Route: Oral
Exposure time: 28 d
Target Organs: Central nervous system
Symptoms: cholinesterase inhibition

Species: Dog
LOAEL: 2 mg/kg
Application Route: Oral
Exposure time: 13 Weeks
Target Organs: Central nervous system
Symptoms: cholinesterase inhibition

Species: Rat
NOAEL: 25 mg/kg
Application Route: Oral
Exposure time: 90 d
Target Organs: Central nervous system
Symptoms: cholinesterase inhibition
Remarks: No significant adverse effects were reported

Species: Dog
LOAEL: 0.5 mg/kg
Application Route: Oral
Exposure time: 2 yr
Target Organs: Central nervous system
Symptoms: cholinesterase inhibition
Species: Rat
LOAEL: 2.1 mg/kg
Application Route: Oral
Exposure time: 2 yr
Target Organs: Central nervous system
Symptoms: cholinesterase inhibition

Species: Dog
NOAEL: 2.5 mg/kg
LOAEL: 12.5 mg/kg
Application Route: Oral (feed)
Exposure time: 90 d
Symptoms: reduced body weight gain, reduced food consumption

Species: Rat
NOAEL: 10 mg/kg
LOAEL: 50 mg/kg
Application Route: Dermal
Exposure time: 21 d
Target Organs: Nervous system

Species: Dog
NOAEL: 0.1 mg/kg
LOAEL: 0.5 mg/kg
Application Route: Oral
Exposure time: 1 yr
Target Organs: Nervous system
Symptoms: Gastrointestinal disturbance, Vomiting, Convulsions, ataxia, Liver effects

Aspiration toxicity
Not classified based on available information.

Experience with human exposure

Components:

Pirimiphos-methyl (ISO):
Ingestion: Symptoms: Nausea, Vomiting, Dizziness, confusion, Headache, Weakness, stomach discomfort, Blurred vision, muscle twitching
lambda-cyhalothrin (ISO):

**Inhalation**
- Symptoms: Cough, Local irritation, sneezing

**Skin contact**
- Symptoms: Skin irritation, tingling, superficial burning sensation, Local irritation
- Remarks: Can be absorbed through skin.

**Eye contact**
- Symptoms: Eye irritation

**Ingestion**
- Symptoms: Gastrointestinal disturbance

**SECTION 12: Ecological information**

### 12.1 Toxicity

**Components:**

**Pirimiphos-methyl (ISO):**

- **Toxicity to fish**
  - LC50 (Oncorhynchus mykiss (rainbow trout)): 0.2 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203

- **Toxicity to daphnia and other aquatic invertebrates**
  - EC50 (Daphnia magna (Water flea)): 0.00021 mg/l
  - Exposure time: 48 h
  - Method: OECD Test Guideline 202

- **Toxicity to algae/aquatic plants**
  - EC50 (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201

- **M-Factor (Acute aquatic toxicity)**
  - 1,000

- **Toxicity to fish (Chronic toxicity)**
  - NOEC: 0.13 mg/l
  - Exposure time: 35 d
  - Species: Pimephales promelas (fathead minnow)
  - Method: OECD Test Guideline 210

- **Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
  - NOEC: 0.00011 mg/l
  - Exposure time: 21 d
  - Species: Daphnia magna (Water flea)
  - Method: OECD Test Guideline 211

- **M-Factor (Chronic aquatic toxicity)**
  - 100

**lambda-cyhalothrin (ISO):**

- **Toxicity to fish**
  - LC50 (Oncorhynchus mykiss (rainbow trout)): 0.00019 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials

  - LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.00021 mg/l
  - Exposure time: 96 h
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<thead>
<tr>
<th>Version</th>
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<td>09.01.2017</td>
</tr>
</tbody>
</table>

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 0.00004 mg/l
- Exposure time: 48 h
- Method: OECD Test Guideline 203
- Remarks: Based on data from similar materials

M-Factor (Acute aquatic toxicity): 10,000

Toxicity to fish (Chronic toxicity):
- NOEC: 0.000062 mg/l
- Exposure time: 32 d
- Species: Pimephales promelas (fathead minnow)
- Method: OECD Test Guideline 210
- Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC: 0.0035 µg/l
- Exposure time: 21 d
- Species: Daphnia magna (Water flea)
- Method: OECD Test Guideline 211
- Remarks: Based on data from similar materials

M-Factor (Chronic aquatic toxicity): 10,000

12.2 Persistence and degradability

**Components:**

**Pirimiphos-methyl (ISO):**
- Stability in water: Hydrolysis: 50 % (117 d)

12.3 Bioaccumulative potential

**Components:**

**Pirimiphos-methyl (ISO):**
- Partition coefficient: n-octanol/water: log Pow: 4.2

**lambda-cyhalothrin (ISO):**
- Bioaccumulation: Bioconcentration factor (BCF): 2,240
- Method: OECD Test Guideline 305

**Components:**

**lambda-cyhalothrin (ISO):**
- Distribution among environment: log Koc: 5.5

12.4 Mobility in soil

**Components:**
mental compartments

12.5 Results of PBT and vPvB assessment
Not relevant

12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

<table>
<thead>
<tr>
<th>ADN</th>
<th>UN 2811</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>UN 2811</td>
</tr>
<tr>
<td>RID</td>
<td>UN 2811</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN 2811</td>
</tr>
<tr>
<td>IATA</td>
<td>UN 2811</td>
</tr>
</tbody>
</table>

14.2 UN proper shipping name

<table>
<thead>
<tr>
<th>ADN</th>
<th>TOXIC SOLID, ORGANIC, N.O.S. (lambda-cyhalothrin (ISO), Pirimiphos-methyl (ISO))</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>TOXIC SOLID, ORGANIC, N.O.S. (lambda-cyhalothrin (ISO), Pirimiphos-methyl (ISO))</td>
</tr>
<tr>
<td>RID</td>
<td>TOXIC SOLID, ORGANIC, N.O.S. (lambda-cyhalothrin (ISO), Pirimiphos-methyl (ISO))</td>
</tr>
<tr>
<td>IMDG</td>
<td>TOXIC SOLID, ORGANIC, N.O.S. (lambda-cyhalothrin (ISO), Pirimiphos-methyl (ISO))</td>
</tr>
<tr>
<td>IATA</td>
<td>Toxic solid, organic, n.o.s. (lambda-cyhalothrin (ISO), Pirimiphos-methyl (ISO))</td>
</tr>
</tbody>
</table>

14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADN</th>
<th>6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>6.1</td>
</tr>
<tr>
<td>RID</td>
<td>6.1</td>
</tr>
</tbody>
</table>
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IMDG : 6.1
IATA : 6.1

14.4 Packing group

ADN
Packing group : III
Classification Code : T2
Hazard Identification Number : 60
Labels : 6.1

ADR
Packing group : III
Classification Code : T2
Hazard Identification Number : 60
Labels : 6.1
Tunnel restriction code : (E)

RID
Packing group : III
Classification Code : T2
Hazard Identification Number : 60
Labels : 6.1

IMDG
Packing group : III
Labels : 6.1
EmS Code : F-A, S-A

IATA (Cargo)
Packing instruction (cargo aircraft) : 677
Packing instruction (LQ) : Y645
Packing group : III
Labels : Toxic

IATA (Passenger)
Packing instruction (passenger aircraft) : 670
Packing instruction (LQ) : Y645
Packing group : III
Labels : Toxic

14.5 Environmental hazards

ADN
Environmentally hazardous : yes

ADR
Environmentally hazardous : yes

RID
Environmentally hazardous : yes

IMDG
Marine pollutant : yes
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<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>SDS Number:</th>
<th>Date of last issue:</th>
<th>Date of first issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>09/13/2019</td>
<td>1204536-00009</td>
<td>24.04.2019</td>
<td>09.01.2017</td>
</tr>
</tbody>
</table>

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 and the IBC Code
Remarks: Not applicable for product as supplied.

SECTION 15: Regulatory information

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

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
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Not applicable

<table>
<thead>
<tr>
<th>Quantity 1</th>
<th>Quantity 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2</td>
<td>50 t</td>
</tr>
<tr>
<td>E1</td>
<td>100 t</td>
</tr>
</tbody>
</table>

Other regulations:
Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:
AICS: not determined
DSL: not determined
IECSC: not determined

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information
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Date of first issue: 09.01.2017

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

Full text of H-Statements

H301 : Toxic if swallowed.
H302 : Harmful if swallowed.
H311 : Toxic in contact with skin.
H312 : Harmful in contact with skin.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H330 : Fatal if inhaled.
H370 : Causes damage to organs.
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 : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Irrit. : Eye irritation
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

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 Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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 Civil Aviation Organization; 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; IC50 - 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, Evalua-
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Further information:
Classification of the mixture:

Classification procedure:
Acute Tox. 4  H302  Calculation method
Acute Tox. 3  H331  Calculation method
Skin Irrit. 2  H315  Calculation method
Eye Irrit. 2  H319  Calculation method
STOT SE 1  H370  Calculation method
Aquatic Acute 1  H400  Calculation method
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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

GB / EN