SAFETY DATA SHEET
Abamectin / Fluazuron Formulation

Section 1: Identification

Product name : Abamectin / Fluazuron Formulation

Manufacturer or supplier’s details
Company : MSD
Address : 33 Whakatiki Street - Private Bag 908
          Upper Hutt - New Zealand
Telephone : 908-740-4000
Emergency telephone number : 1-908-423-6000
E-mail address : EHSDATASTEWARD@msd.com
Telefax : 908-735-1496

Recommended use of the chemical and restrictions on use
Recommended use : Veterinary product

Section 2: Hazard identification

GHS Classification
Flammable liquids : Flam. Liq.3
Acute toxicity (Inhalation) : Acute Tox.4
Skin corrosion/irritation : 2
Serious eye damage/eye irritation : 2A
Skin sensitisation : Skin Sens.1
Reproductive toxicity : Repr.1B
Specific target organ toxicity - single exposure : STOT SE3
Specific target organ toxicity - repeated exposure : STOT RE2 (Central nervous system)

GHS label elements
Hazard pictograms : 
Signal word : Danger
Hazard statements:  
- H226 Flammable liquid and vapour. 
- H315 Causes skin irritation. 
- H317 May cause an allergic skin reaction. 
- H319 Causes serious eye irritation. 
- H332 Harmful if inhaled. 
- H335 May cause respiratory irritation. 
- H336 May cause drowsiness or dizziness. 
- H360D May damage the unborn child. 
- H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

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/ sparks/ open flames/ hot surfaces. No smoking. 
- P233 Keep container tightly closed. 
- P241 Use explosion-proof electrical/ ventilating/ lighting equipment. 
- P242 Use only non-sparking tools. 
- P243 Take precautionary measures against static discharge. 
- P260 Do not breathe mist or vapours. 
- P264 Wash skin thoroughly after handling. 
- P271 Use only outdoors or in a well-ventilated area. 
- P272 Contaminated work clothing should not be allowed out of the workplace. 
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 
- P281 Use personal protective equipment as required. 

**Response:**
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. 
- P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician 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. 
- P308 + P313 IF exposed or concerned: Get medical advice/ attention. 
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. 
- P337 + P313 If eye irritation persists: Get medical advice/ attention. 
- P362 Take off contaminated clothing and wash before reuse. 

**Storage:**
- P403 + P235 Store in a well-ventilated place. Keep cool. 
- P405 Store locked up. 

**Disposal:**
- P501 Dispose of contents/ container to an approved waste
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Version 4.0  Revision Date: 23.03.2020  SDS Number: 800408-00014  Date of last issue: 13.09.2019
Date of first issue: 12.07.2016

Other hazards which do not result in classification
Vapours may form explosive mixture with air.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>&gt;= 30 - &lt; 60</td>
</tr>
<tr>
<td>N-Methyl-2-pyrolidone</td>
<td>872-50-4</td>
<td>&gt;= 30 - &lt; 60</td>
</tr>
<tr>
<td>Fluazuron</td>
<td>86811-58-7</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Abamectin (combination of avermectin B1a and avermectin B1b)</td>
<td>71751-41-2</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
<tr>
<td>7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate</td>
<td>2386-87-0</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
</tbody>
</table>

Section 4: 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.

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. Get medical attention. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.
## Section 5: Fire-fighting measures

<table>
<thead>
<tr>
<th>Protection of first-aiders</th>
<th>Notes to physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
<td>Treat symptomatically and supportively.</td>
</tr>
</tbody>
</table>

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

### Unsuitable extinguishing media:
- High volume water jet

### Specific hazards during fire-fighting:
- Do not use a solid water stream as it may scatter and spread fire.
- Flash back possible over considerable distance.
- Vapours may form explosive mixtures with air.
- Exposure to combustion products may be a hazard to health.

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

### 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.

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

### Hazchem Code:
- 3Y

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:
- Remove all sources of ignition.
- Use personal protective equipment.
- Follow safe handling advice and personal protective equipment recommendations.

### Environmental precautions:
- Discharge into the environment must be avoided.
- Prevent further leakage or spillage if safe to do so.
- Prevent spreading over a wide area (e.g. by containment or oil barriers).
- Retain and dispose of contaminated wash water.
- Local authorities should be advised if significant spillages cannot be contained.

### Methods and materials for containment and cleaning up:
- Non-sparking tools should be used.
- Soak up with inert absorbent material.
- Suppress (knock down) gases/vapours/mists with a water spray jet.
- For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can
be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. 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.

Section 7: Handling and storage

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation. If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.
Advice on safe handling : Do not get on skin or clothing. Do not breathe vapours or spray mist. 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 Non-sparking tools should be used. Keep container tightly closed. Already sensitised individuals should consult their physician regarding working with respiratory irritants or sensitisers. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. 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.
Materials to avoid : Do not store with the following product types: Self-reactive substances and mixtures Organic peroxides Oxidizing agents
### Section 8: Exposure controls/personal protection

#### Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>WES-TWA</td>
<td>400 ppm 983 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WES-STEEL</td>
<td>500 ppm 1,230 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>872-50-4</td>
<td>WES-STEEL</td>
<td>75 ppm 309 mg/m³</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluazuron</td>
<td>86811-58-7</td>
<td>TWA</td>
<td>60 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wick limit</td>
<td>600 µg/100cm²</td>
<td>Internal</td>
</tr>
<tr>
<td>Abamectin (combination of avermectin B1a and avermec-tin B1b)</td>
<td>71751-41-2</td>
<td>TWA</td>
<td>30 µg/m³ (OEB 3)</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wick limit</td>
<td>300 µg/100cm²</td>
<td>Internal</td>
</tr>
</tbody>
</table>

Further information: Skin absorption

<table>
<thead>
<tr>
<th>Components</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluazuron</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abamectin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methyl-2-pyrrolidone</td>
<td>872-50-4</td>
<td>5-Hydroxy-N-methyl-2-pyrrolidone</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>100 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>Acetone</td>
<td>Urine</td>
<td>End of shift at end of work-week</td>
<td>40 mg/l</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

#### Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., dripless quick connections).
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

**Respiratory protection**
- If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

**Filter type**
- Combined particulates and organic vapour type

**Hand protection**
- Material: Chemical-resistant gloves
- Remarks: Consider double gloving. Take note that the product is flammable, which may impact the selection of hand protection.

**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.

**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.

### Section 9: Physical and chemical properties

**Appearance**
- liquid

**Colour**
- No data available

**Odour**
- No data available

**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**
- 28 °C

**Evaporation rate**
- No data available
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<table>
<thead>
<tr>
<th>Flammability (solid, gas)</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (liquids)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
</tr>
<tr>
<td>Particle size</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Section 10: Stability and reactivity

Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Flammable liquid and vapour. Vapours may form explosive mixture with air. Can react with strong oxidizing agents.
Conditions to avoid : Heat, flames and sparks.
Incompatible materials : Oxidizing agents
Hazardous decomposition products : No hazardous decomposition products are known.
Section 11: Toxicological information

Exposure routes: Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity
Harmful if inhaled.

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

Acute inhalation toxicity: Acute toxicity estimate: 2.06 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:

Propan-2-ol:
Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity: LC50 (Rat): > 25 mg/l
Exposure time: 6 h
Test atmosphere: vapour

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

N-Methyl-2-pyrrolidone:
Acute oral toxicity: LD50 (Rat): 4,150 mg/kg

Acute inhalation toxicity: LC50 (Rat): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

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

Fluazuron:
Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity: LC50 (Rat): > 6.0 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg
Abamectin (combination of avermectin B1a and avermectin B1b):

- **Acute oral toxicity**: LD50 (Rat): 24 mg/kg
- LD50 (Mouse): 10 mg/kg
- LDLo (Monkey): 24 mg/kg
- **Symptoms**: Dilatation of the pupil

- **Acute inhalation toxicity**: LC50 (Rat): 0.023 mg/l
  - Exposure time: 4 h
  - Test atmosphere: dust/mist

- **Acute dermal toxicity**: LD50 (Rat): 330 mg/kg
  - LD50 (Rabbit): 2,000 mg/kg

7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

- **Acute oral toxicity**: LD50 (Rat, male): 2,959 - 5,000 mg/kg
  - Method: OECD Test Guideline 401

- **Acute inhalation toxicity**: LC50 (Rat): >= 5.19 mg/l
  - Exposure time: 4 h
  - Test atmosphere: dust/mist
  - Method: OECD Test Guideline 436
  - Assessment: The substance or mixture has no acute inhalation toxicity

- **Acute dermal toxicity**: LD50 (Rat): > 2,000 mg/kg
  - Method: OECD Test Guideline 402
  - Assessment: The substance or mixture has no acute dermal toxicity

**Skin corrosion/irritation**

Causes skin irritation.

**Components:**

**Propan-2-ol:**

- **Species**: Rabbit
- **Result**: No skin irritation

**N-Methyl-2-pyrrolidone:**

- **Result**: Skin irritation

**Fluazuron:**

- **Species**: Rabbit
- **Method**: OECD Test Guideline 404
- **Result**: No skin irritation
Abamectin (combination of avermectin B1a and avermectin B1b):

<table>
<thead>
<tr>
<th>Species</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>No skin irritation</td>
</tr>
</tbody>
</table>

7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD Test Guideline 404</td>
</tr>
<tr>
<td>Result</td>
<td>No skin irritation</td>
</tr>
</tbody>
</table>

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Propan-2-ol:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Irritation to eyes, reversing within 21 days</td>
</tr>
</tbody>
</table>

N-Methyl-2-pyrrolidone:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Irritation to eyes, reversing within 21 days</td>
</tr>
</tbody>
</table>

Fluazuron:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Mild eye irritation</td>
</tr>
<tr>
<td>Method</td>
<td>OECD Test Guideline 405</td>
</tr>
</tbody>
</table>

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Components:

Propan-2-ol:

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Buehler Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure routes</td>
<td>Skin contact</td>
</tr>
<tr>
<td>Species</td>
<td>Guinea pig</td>
</tr>
<tr>
<td>Method</td>
<td>OECD Test Guideline 406</td>
</tr>
</tbody>
</table>
### Abamectin / Fluazuron Formulation

<table>
<thead>
<tr>
<th>Component Description</th>
<th>Test Type</th>
<th>Exposure routes</th>
<th>Species</th>
<th>Result</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N-Methyl-2-pyrrolidone:</strong></td>
<td>Local lymph node assay (LLNA)</td>
<td>Skin contact</td>
<td>Mouse</td>
<td>negative</td>
<td>Based on data from similar materials</td>
</tr>
<tr>
<td><strong>Fluazuron:</strong></td>
<td>Skin contact</td>
<td>Guinea pig</td>
<td>negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Abamectin (combination of avermectin B1a and avermectin B1b):</strong></td>
<td>Maximisation Test</td>
<td>Skin contact</td>
<td>Not a skin sensitizer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:</strong></td>
<td>Maximisation Test</td>
<td>Skin contact</td>
<td>positive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Assessment:** Probability or evidence of skin sensitisation in humans

### Chronic toxicity

**Germ cell mutagenicity**

Not classified based on available information.

### Components:

#### Propan-2-ol:

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial reverse mutation assay (AMES)</td>
<td>negative</td>
</tr>
<tr>
<td>In vitro mammalian cell gene mutation test</td>
<td>negative</td>
</tr>
</tbody>
</table>

#### N-Methyl-2-pyrrolidone:

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial reverse mutation assay (AMES)</td>
<td>OECD Test Guideline 471</td>
</tr>
<tr>
<td>Genotoxicity in vivo</td>
<td>Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Species: Mouse</td>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td>Method: OECD Test Guideline 474</td>
<td>Result: negative</td>
</tr>
<tr>
<td>Genotoxicity in vivo</td>
<td>Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)</td>
</tr>
<tr>
<td>Species: Hamster</td>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td>Method: OECD Test Guideline 475</td>
<td>Result: negative</td>
</tr>
</tbody>
</table>

Fluazuron:

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: Bacterial reverse mutation assay (AMES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: DNA Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: In vitro mammalian cell gene mutation test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

Abamectin (combination of avermectin B1a and avermectin B1b):

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: Bacterial reverse mutation assay (AMES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: In vitro mammalian cell gene mutation test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genotoxicity in vivo</th>
<th>Test Type: Alkaline elution assay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genotoxicity in vivo</th>
<th>Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species: Mouse</td>
<td>Application Route: Intraperitoneal injection</td>
</tr>
<tr>
<td>Result: negative</td>
<td></td>
</tr>
</tbody>
</table>
### 7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:

<table>
<thead>
<tr>
<th>Genotoxicity in vitro</th>
<th>Test Type: In vitro mammalian cell gene mutation test</th>
<th>Result: positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genotoxicity in vivo</td>
<td>Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo</td>
<td>Species: Rat</td>
</tr>
<tr>
<td></td>
<td>Application Route: Ingestion</td>
<td>Method: OECD Test Guideline 486</td>
</tr>
<tr>
<td></td>
<td>Result: negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Type: Micronucleus test</td>
<td>Species: Mouse</td>
</tr>
<tr>
<td></td>
<td>Application Route: Intraperitoneal injection</td>
<td>Method: OECD Test Guideline 453</td>
</tr>
<tr>
<td></td>
<td>Result: negative</td>
<td>Result: negative</td>
</tr>
</tbody>
</table>

**Germ cell mutagenicity - Assessment**: Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

Not classified based on available information.

### Components:

#### Propan-2-ol:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>inhalation (vapour)</td>
</tr>
<tr>
<td>Exposure time</td>
<td>104 weeks</td>
</tr>
<tr>
<td>Method</td>
<td>OECD Test Guideline 451</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
</tbody>
</table>

#### N-Methyl-2-pyrrolidone:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>Ingestion</td>
</tr>
<tr>
<td>Exposure time</td>
<td>2 Years</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>inhalation (vapour)</td>
</tr>
<tr>
<td>Exposure time</td>
<td>2 Years</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
</tbody>
</table>

#### Fluazuron:

<table>
<thead>
<tr>
<th>Species</th>
<th>Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>Ingestion</td>
</tr>
<tr>
<td>Exposure time</td>
<td>2 Years</td>
</tr>
<tr>
<td>Method</td>
<td>OECD Test Guideline 453</td>
</tr>
<tr>
<td>Result</td>
<td>negative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Route</td>
<td>Ingestion</td>
</tr>
</tbody>
</table>
Exposure time : 2 Years
Result : negative

Abamectin (combination of avermectin B1a and avermectin B1b):
Species : Rat
Application Route : Oral
Exposure time : 105 weeks
Result : negative

Species : Mouse
Application Route : Oral
Exposure time : 93 weeks
Result : negative

Reproductive toxicity
May damage the unborn child.

Components:

Propan-2-ol:
Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryofetal development
Species: Rat
Application Route: Ingestion
Result: negative

N-Methyl-2-pyrrolidone:
Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

Effects on foetal development : Test Type: Embryofetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: positive

Test Type: Fertility/early embryonic development
Species: Rat
Application Route: inhalation (vapour)
Result: positive

Test Type: Embryofetal development
Species: Rabbit
Application Route: Ingestion
Result: positive
<table>
<thead>
<tr>
<th>Reproductive toxicity - Assessment</th>
<th>Clear evidence of adverse effects on development, based on animal experiments.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluazuron:</strong></td>
<td></td>
</tr>
<tr>
<td>Effects on fertility</td>
<td>Test Type: Two-generation reproduction toxicity study</td>
</tr>
<tr>
<td></td>
<td>Species: Rat</td>
</tr>
<tr>
<td></td>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td></td>
<td>Result: negative</td>
</tr>
<tr>
<td>Effects on foetal development</td>
<td>Test Type: Embryo-foetal development</td>
</tr>
<tr>
<td></td>
<td>Species: Rat</td>
</tr>
<tr>
<td></td>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td></td>
<td>Result: negative</td>
</tr>
<tr>
<td></td>
<td>Test Type: Embryo-foetal development</td>
</tr>
<tr>
<td></td>
<td>Species: Rabbit</td>
</tr>
<tr>
<td></td>
<td>Application Route: Ingestion</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 414</td>
</tr>
<tr>
<td></td>
<td>Result: negative</td>
</tr>
<tr>
<td><strong>Abamectin (combination of avermectin B1a and avermectin B1b):</strong></td>
<td></td>
</tr>
<tr>
<td>Effects on fertility</td>
<td>Test Type: Fertility</td>
</tr>
<tr>
<td></td>
<td>Species: Rat, male</td>
</tr>
<tr>
<td></td>
<td>Application Route: Oral</td>
</tr>
<tr>
<td></td>
<td>Result: Effects on fertility</td>
</tr>
<tr>
<td></td>
<td>Test Type: Two-generation reproduction toxicity study</td>
</tr>
<tr>
<td></td>
<td>Species: Rat</td>
</tr>
<tr>
<td></td>
<td>Application Route: Oral</td>
</tr>
<tr>
<td></td>
<td>Early Embryonic Development: NOAEL: 0.12 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>Result: Fetotoxicity</td>
</tr>
<tr>
<td>Effects on foetal development</td>
<td>Test Type: Embryo-foetal development</td>
</tr>
<tr>
<td></td>
<td>Species: Mouse</td>
</tr>
<tr>
<td></td>
<td>Application Route: Oral</td>
</tr>
<tr>
<td></td>
<td>General Toxicity Maternal: NOAEL: 0.05 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>Developmental Toxicity: NOAEL: 0.2 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>Result: Cleft palate</td>
</tr>
<tr>
<td></td>
<td>Remarks: Adverse developmental effects were observed</td>
</tr>
<tr>
<td></td>
<td>Test Type: Embryo-foetal development</td>
</tr>
<tr>
<td></td>
<td>Species: Rabbit</td>
</tr>
<tr>
<td></td>
<td>Application Route: Oral</td>
</tr>
<tr>
<td></td>
<td>Developmental Toxicity: LOAEL: 2 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>Result: Cleft palate, Teratogenic effects, Reduced embryonic survival</td>
</tr>
<tr>
<td></td>
<td>Remarks: Adverse developmental effects were observed</td>
</tr>
<tr>
<td></td>
<td>Test Type: Development</td>
</tr>
<tr>
<td></td>
<td>Species: Rat</td>
</tr>
<tr>
<td></td>
<td>Application Route: Oral</td>
</tr>
<tr>
<td></td>
<td>Developmental Toxicity: LOAEL: 1.6 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>Result: Teratogenic effects</td>
</tr>
</tbody>
</table>
Reproductive toxicity - Assessment: Some evidence of adverse effects on sexual function and fertility, based on animal experiments. Some evidence of adverse effects on development, based on animal experiments.

7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:
- Effects on foetal development: Test Type: Embryofetal development
  - Species: Rat
  - Application Route: Ingestion
  - Method: OECD Test Guideline 414
  - Result: negative

STOT - single exposure
- May cause respiratory irritation.
- May cause drowsiness or dizziness.

Components:
- Propan-2-ol:
  - Assessment: May cause drowsiness or dizziness.

N-Methyl-2-pyrrolidone:
- Assessment: May cause respiratory irritation.

STOT - repeated exposure
- May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Components:
- Abamectin (combination of avermectin B1a and avermectin B1b):
  - Exposure routes: Ingestion
  - Target Organs: Central nervous system
  - Assessment: Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:
- Propan-2-ol:
  - Species: Rat
  - NOAEL: 12.5 mg/l
  - Application Route: Inhalation (vapour)
  - Exposure time: 104 Weeks

N-Methyl-2-pyrrolidone:
- Species: Rat, male
  - NOAEL: 169 mg/kg
  - LOAEL: 433 mg/kg
  - Application Route: Ingestion
  - Exposure time: 90 Days
### Method
- Species: Rat
- NOAEL: 0.5 mg/l
- LOAEL: 1 mg/l
- Application Route: inhalation (dust/mist/fume)
- Exposure time: 96 Days
- Method: OECD Test Guideline 408

### Fluazuron:
- Species: Rabbit
- NOAEL: 826 mg/kg
- LOAEL: 1,653 mg/kg
- Application Route: Skin contact
- Exposure time: 20 Days

### Abamectin (combination of avermectin B1a and avermectin B1b):
- Species: Rat
- NOAEL: 1.5 mg/kg
- LOAEL: 1 mg/kg
- Application Route: Oral
- Exposure time: 24 Months
- Target Organs: Central nervous system
- Symptoms: Tremors, ataxia

- Species: Mouse
- NOAEL: 4.0 mg/kg
- Application Route: Oral
- Exposure time: 24 Months
- Target Organs: Central nervous system
- Symptoms: Tremors, ataxia

- Species: Dog
- NOAEL: 0.25 mg/kg
- LOAEL: 0.5 mg/kg
- Application Route: Oral
Exposure time : 53 Weeks
Target Organs : Central nervous system
Symptoms : Tremors, weight loss
Remarks : mortality observed

Species : Monkey
NOAEL : 1.0 mg/kg
Application Route : Oral
Exposure time : 14 Weeks
Target Organs : Central nervous system

Aspiration toxicity
Not classified based on available information.

Experience with human exposure

Components:

N-Methyl-2-pyrrolidone:

Skin contact : Symptoms: Skin irritation

Abamectin (combination of avermectin B1a and avermectin B1b):

Ingestion : Symptoms: May cause, Tremors, Diarrhoea, central nervous system effects, Salivation, tearing

Section 12: Ecological information

Ecotoxicity

Components:

Propan-2-ol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l
Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 24 h
Toxicity to microorganisms : EC50 (Pseudomonas putida): > 1,050 mg/l
Exposure time: 16 h

N-Methyl-2-pyrrolidone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 500 mg/l
Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 24 h
Method: DIN 38412
Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 600.5 mg/l
Exposure time: 72 h
EC10 (Desmodesmus subspicatus (green algae)): 92.6 mg/l
Exposure time: 72 h
<table>
<thead>
<tr>
<th>Substance</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to algae/aquatic plants</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to algae/aquatic plants</th>
<th>Toxicity to fish (Chronic toxicity)</th>
<th>Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abamectin (combination of avermectin B1a and avermectin B1b)</td>
<td>NOEC (Daphnia magna (Water flea)): 12.5 mg/l Exposure time: 21 d Method: OECD Test Guideline 211</td>
<td>EC50: &gt; 600 mg/l Exposure time: 30 min Method: ISO 8192</td>
<td>NOEC (Raphidocelis subcapitata (freshwater green alga)): 27.9 mg/l Exposure time: 72 h</td>
<td>LC50 (Oncorhynchus mykiss (rainbow trout)): 3.2 µg/l Exposure time: 96 h</td>
<td>NOEC (Americamysis): 0.022 µg/l Exposure time: 96 h</td>
<td>NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l Exposure time: 72 h</td>
<td>NOEC (Pimephales promelas (fathead minnow)): 0.52 µg/l Exposure time: 32 d</td>
<td>NOEC (Mysidopsis bahia (opossum shrimp)): 0.0035 µg/l Exposure time: 28 d</td>
</tr>
<tr>
<td>Fluazuron</td>
<td>LC50 (Cyprinus carpio (Carp)): &gt; 9.1 mg/l Exposure time: 96 h</td>
<td>EC50 (Daphnia sp. (water flea)): 0.0006 mg/l Exposure time: 48 h</td>
<td>NOEC (Raphidocelis subcapitata (freshwater green alga)): 27.9 mg/l Exposure time: 72 h</td>
<td>LC50 (Pimephales promelas (fathead minnow)): 0.52 µg/l Exposure time: 32 d</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Toxicity to algae/aquatic plants**

- Fluazuron: NOEC (Raphidocelis subcapitata (freshwater green alga)): 27.9 mg/l Exposure time: 72 h
- Abamectin: NOEC (Mysidopsis bahia (opossum shrimp)): 0.0035 µg/l Exposure time: 28 d
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Abamectin / Fluazuron Formulation

Toxicity to microorganisms:
- EC50: > 1,000 mg/l
- Exposure time: 3 h
- Test Type: Respiration inhibition

7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:
- Toxicity to fish:
  - LC50 (Oncorhynchus mykiss (rainbow trout)): 24 mg/l
  - Exposure time: 96 h
  - Method: OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates:
  - EC50 (Daphnia magna (Water flea)): 40 mg/l
  - Exposure time: 48 h
  - Method: OECD Test Guideline 202

- Toxicity to algae/aquatic plants:
  - Ec50 (Selenastrum capricornutum (green algae)): > 110 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201

  NOEC (Selenastrum capricornutum (green algae)): 30 mg/l
  - Exposure time: 72 h
  - Method: OECD Test Guideline 201

- Toxicity to microorganisms:
  - EC10 (Natural microorganism): 409 mg/l
  - Exposure time: 3 h
  - Method: OECD Test Guideline 209

Persistence and degradability

Components:

Propan-2-ol:
- Biodegradability: Result: rapidly degradable
- BOD/COD: BOD: 1.19 (BOD5) COD: 2.23 BOD/COD: 53 %

N-Methyl-2-pyrrolidone:
- Biodegradability: Result: Readily biodegradable.
  - Biodegradation: 73 %
  - Exposure time: 28 d
  - Method: OECD Test Guideline 301C

Abamectin (combination of avermectin B1a and avermectin B1b):
- Stability in water: Hydrolysis: 50 % (< 12 h)

7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:
- Biodegradability: Biodegradation: 71 %
  - Exposure time: 28 d
  - Method: OECD Test Guideline 301B

- Stability in water: Degradation half life (DT50): 2 d
Bioaccumulative potential

**Components:**

**Propan-2-ol:**
- Partition coefficient: n-octanol/water
- \( \log \text{Pow} = 0.05 \)

**N-Methyl-2-pyrrolidone:**
- Partition coefficient: n-octanol/water
- \( \log \text{Pow} = -0.46 \)
  Method: OECD Test Guideline 107

**Fluazuron:**
- Partition coefficient: n-octanol/water
- \( \log \text{Pow} = 5.1 \)

**Abamectin (combination of avermectin B1a and avermectin B1b):**
- Bioaccumulation: Bioconcentration factor (BCF): 52
- Partition coefficient: n-octanol/water
- \( \log \text{Pow} = 4 \)

**7-Oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3-carboxylate:**
- Partition coefficient: n-octanol/water
- \( \log \text{Pow} = 1.34 \)

Mobility in soil

**Components:**

**Abamectin (combination of avermectin B1a and avermectin B1b):**
- Distribution among environmental compartments
- \( \log \text{Koc} > 3.6 \)

Other adverse effects
No data available

Section 13: Disposal considerations

**Disposal methods**

Waste from residues: Dispose of in accordance with local regulations.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product.

Section 14: Transport information

**International Regulations**

UNRTDG
UN number: UN 1993
Proper shipping name: FLAMMABLE LIQUID, N.O.S.  
(Propan-2-ol)

Class: 3
Packing group: III
Labels: 3

IATA-DGR
UN/ID No.: UN 1993
Proper shipping name: Flammable liquid, n.o.s.  
(Propan-2-ol)

Class: 3
Packing group: III
Labels: Flammable Liquids
Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355

IMDG-Code
UN number: UN 1993
Proper shipping name: FLAMMABLE LIQUID, N.O.S.  
(Propan-2-ol, Fluazuron, Abamectin (combination of avermectin B1a and avermectin B1b))

Class: 3
Packing group: III
Labels: 3
EmS Code: F-E, S-E
Marine pollutant: yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

NZS 5433
UN number: UN 1993
Proper shipping name: FLAMMABLE LIQUID, N.O.S.  
(Propan-2-ol)

Class: 3
Packing group: III
Labels: 3
Hazchem Code: 3Y

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.

Section 15: Regulatory information

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

Abamectin / Fluazuron Formulation

Version 4.0 Revision Date: 23.03.2020 SDS Number: 800408-00014 Date of last issue: 13.09.2019
Date of first issue: 12.07.2016

HSNO Approval Number
HSR100759 Veterinary Medicines Non dispersive Open System Application Group Standard 2017

HSW Controls
Certified handler certificate not required.
Tracking hazardous substance not required.
Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

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

Section 16: Other information

Further information

Date format : dd.mm.yyyy

Full text of other abbreviations
ACGIH : USA, ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average
NZ OEL / WES-STEL : Workplace Exposure Standard - Short-Term Exposure Limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - 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 Or-
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.