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

- **Product identifier**
  - **Trade name:** Colorado Cannabis Pesticide Mixture
  - **Part number:** SCO-100-1
  - **Relevant identified uses of the substance or mixture and uses advised against** Laboratory chemicals
  - **Details of the supplier of the safety data sheet**
    - **Manufacturer/Supplier:** ULTRA Scientific, Inc.
      - 250 Smith Street
      - North Kingstown, RI 02852
      - USA
  - **Further information obtainable from:**
    - **Telephone:** (401) 294-9400
    - **Fax:** (401) 295-2300
    - **E-mail:** regulatory@ultrasci.com
    - **Emergency telephone number:**
      - US: (800) 424-9300
      - Outside US: (703) 527-3887

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    - GHS02 flame
      - Flam. Liq. 2 H225 Highly flammable liquid and vapour.
    - GHS09 environment
      - Aquatic Acute 1 H400 Very toxic to aquatic life.
      - Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
    - GHS07
      - Acute Tox. 4 H302 Harmful if swallowed.
      - Eye Irrit. 2 H319 Causes serious eye irritation.

- **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
    - GHS02 GHS07 GHS09

- **Signal word** Danger
Trade name: Colorado Cannabis Pesticide Mixture

- Hazard-determining components of labelling:
  - Acetonitrile

- Hazard statements
  - H225: Highly flammable liquid and vapour.
  - H302: Harmful if swallowed.
  - H319: Causes serious eye irritation.
  - H410: Very toxic to aquatic life with long lasting effects.

- Precautionary statements
  - P101: If medical advice is needed, have product container or label at hand.
  - P102: Keep out of reach of children.
  - P103: Read label before use.
  - P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P241: Use explosion-proof electrical/ventilating/lighting equipment.
  - P280: Wear protective gloves/protective clothing/eye protection/face protection.
  - P303+P351+P338: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

- Additional information:
  - Contains spirotetramat (ISO). May produce an allergic reaction.

- Other hazards

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

<table>
<thead>
<tr>
<th>CAS: 75-05-8</th>
<th>Acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 200-835-2</td>
<td>Flam. Liq. 2, H225; Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>CAS: 71751-41-2</td>
<td>Abamectin (combination of avermectin B1a and avermectin B1b) (ISO)</td>
</tr>
<tr>
<td>EINECS:</td>
<td>Acute Tox. 2, H300; Acute Tox. 1, H330; Repr. 2, H361d; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>CAS: 153233-91-1</td>
<td>Etoxazol</td>
</tr>
<tr>
<td>EINECS:</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>CAS: 35554-44-0</td>
<td>Imazalil (ISO)</td>
</tr>
<tr>
<td>EINECS: 252-615-0</td>
<td>Acute Tox. 3, H301; Carc. 2, H351; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Acute Tox. 4, H332</td>
</tr>
<tr>
<td>CAS: 121-75-5</td>
<td>Malathion (ISO)</td>
</tr>
<tr>
<td>EINECS: 204-497-7</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
Trade name: Colorado Cannabis Pesticide Mixture

| CAS: 52645-53-1 | permethrin (ISO) | Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Sens. 1, H317 |
| EINECS: 258-067-9 | | 0.0127% |

| CAS: 203313-25-1 | spirotetramat (ISO) | Repr. 2, H361fd; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Irrit. 2, H319; Skin Sens. 1A, H317; STOT SE 3, H335 |
| | | 0.0127% |

| CAS: 107534-96-3 | 1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol | Repr. 2, H361d; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302 |
| ELINCS: 403-640-2 | | 0.0127% |

- **Additional information**: For the wording of the listed hazard phrases refer to section 16.

### 4 First aid measures
- **Description of first aid measures**
- **General information**: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation**: Supply fresh air; consult doctor in case of complaints.
- **After skin contact**: Generally the product does not irritate the skin.
- **After eye contact**: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing**: Call for a doctor immediately.
- **Information for doctor**:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

### 5 Firefighting measures
- **Extinguishing media**
- **Suitable extinguishing agents**: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents**: Water with full jet
- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Advice for firefighters**
- **Protective equipment**: No special measures required.

### 6 Accidental release measures
- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions**: Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up**: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
Trade name: Colorado Cannabis Pesticide Mixture

See Section 13 for disposal information.

7 Handling and storage

- **Handling:** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
    - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**
    - **75-05-8 acetonitrile**
      - WEL [Short-term value: 102 mg/m³, 60 ppm]
      - Long-term value: 68 mg/m³, 40 ppm
  - **Additional information:** The lists valid during the making were used as basis.
  - **Exposure controls**
  - **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes.
    - Avoid contact with the eyes and skin.
  - **Respiratory protection:** Not required.
  - **Protection of hands:**
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Fluid
    - **Colour:** Colourless
  - **Odour:** Aromatic
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/freezing point:** -46°C
  - **Initial boiling point and boiling range:** 81°C
- **Flash point:** 2°C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 525°C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosion properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
  - **Lower:** 4.4 Vol %
  - **Upper:** 16 Vol %
- **Vapour pressure at 20°C:** 0 hPa
- **Density at 20°C:** 0.786 g/cm³
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - **Dynamic at 20°C:** 0.39 mPas
  - **Kinematic:** Not determined.
- **Solvent content:**
  - **Organic solvents:** 0.0 %
  - **VOC (EC):** 0.01 %
Trade name: Colorado Cannabis Pesticide Mixture

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability:
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - Possibility of hazardous reactions: No dangerous reactions known.
  - Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity
    Harmful if swallowed.

  - LD/LC50 values relevant for classification:
    **ATE (Acute Toxicity Estimates)**
    |          | LD50          | LC50/4 h          |
    |----------|---------------|------------------|
    | Oral     | 1,322 mg/kg (rat) |                  |
    | Dermal   | >2,003 mg/kg (rabbit) |                |

    **75-05-8 acetonitrile**
    | Oral     | 1,320 mg/kg (rat) |                  |
    | Dermal   | >2,000 mg/kg (rabbit) |              |
    | Inhalative | 3,587 mg/L (mouse) |                |

    **71751-41-2 abamectin (combination of avermectin B1a and avermectin B1b) (ISO)**
    | Oral     | 1.5 mg/kg (rat)   |                  |
    | Dermal   | >2,000 mg/kg (rabbit) |            |
    | Inhalative | 1,100 mg/L (rat)  |                |

    **153233-91-1 etoxazol**
    | Oral     | >5,000 mg/kg (rat) |                  |
    | Dermal   | >2,000 mg/kg (rat) |                  |
    | Inhalative | >1.09 mg/L (rat)  |                |

    **35554-44-0 imazalil (ISO)**
    | Oral     | 227 mg/kg (rat)   |                  |
    | Dermal   | 4,200 mg/kg (rabbit) |             |

    **121-75-5 malathion (ISO)**
    | Oral     | 1,000 mg/kg (rat)  |                  |
    | Dermal   | 8,790 mg/kg (rabbit) |           |

    **203313-25-1 spirotetramat (ISO)**
    | Oral     | >2,000 mg/kg (rat)  |                  |
    | Inhalative | 4.38 mg/L (rat)    |                |
Trade name: Colorado Cannabis Pesticide Mixture

### 45.2.5

*107534-96-3 1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol*

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>1,700 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>&gt;5,000 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h</td>
<td>&gt;800 mg/L (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation**
    - Causes serious eye irritation.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Ecotoxic effects:**
  - **Remark:** Very toxic for fish
  - **Additional ecological information:**
    - **General notes:**
      - Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
      - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
      - Danger to drinking water if even extremely small quantities leak into the ground.
      - Also poisonous for fish and plankton in water bodies.
      - Very toxic for aquatic organisms
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
  - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
  - **HP 3** Flammable
  - **HP 4** Irritant - skin irritation and eye damage
  - **HP 6** Acute Toxicity
  - **HP 14** Ecotoxic
Safety data sheet  
according to 1907/2006/EC, Article 31

Printing date 11.10.2017  
Version number 1  
Revision: 11.10.2017

Trade name: Colorado Cannabis Pesticide Mixture

- Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>UN1648</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>UN1648 ACETONITRILE, ENVIRONMENTALLY HAZARDOUS</td>
</tr>
<tr>
<td>ADR</td>
<td>ACETONITRILE, MARINE POLLUTANT</td>
</tr>
<tr>
<td>IMDG</td>
<td>ACETONITRILE</td>
</tr>
<tr>
<td>IATA</td>
<td></td>
</tr>
</tbody>
</table>

- **Transport hazard class(es)**
  - ADR, IMDG
  - Class | 3 Flammable liquids.
  - Label | 3

- **IATA**
  - Class | 3 Flammable liquids.
  - Label | 3

- **Packing group**
  - ADR, IMDG, IATA | II

- **Environmental hazards:**
  - Product contains environmentally hazardous substances: abamectin (combination of avermectin B1a and avermectin B1b) (ISO), malathion (ISO)
  - Marine pollutant: Symbol (fish and tree)
  - Special marking (ADR): Symbol (fish and tree)

- **Special precautions for user**
  - Warning: Flammable liquids.
  - Danger code (Kemler): 33
  - EMS Number: F-E,S-D
  - Stowage Category: B
  - Stowage Code: SW2 Clear of living quarters.

- **Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.
Trade name: Colorado Cannabis Pesticide Mixture

- Transport/Additional information:
  - ADR
  - Limited quantities (LQ) 1L
  - Excepted quantities (EQ) Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml
  - Transport category 2
  - Tunnel restriction code D/E
  - IMDG
  - Limited quantities (LQ) 1L
  - Excepted quantities (EQ) Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml
  - UN "Model Regulation":
  - UN 1648 ACETONITRILE, 3, II,
  - ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- Seveso category
  - E1 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H300 Fatal if swallowed.
  - H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled.
  - H332 Harmful if inhaled.
  - H335 May cause respiratory irritation.
  - H351 Suspected of causing cancer.
  - H361d Suspected of damaging the unborn child.
  - H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
  - H372 Causes damage to organs through prolonged or repeated exposure.

(Contd. on page 10)
Trade name: Colorado Cannabis Pesticide Mixture

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 1: Acute toxicity – Category 1
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1