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

- **Product identifier**
- **Trade name:** Cannabichromene (CBC) Standard -1mL
- **Part number:** 5191-3928
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Agilent Technologies Manufacturing GmbH & Co. KG
    Hewlett-Packard-Str.8
    76337 Waldbronn
    Germany
  - **Further information obtainable from:**
    Telephone: 0800 603 1000
    pdl-msds_author@agilent.com
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

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.
  - 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

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  - acetonitrile
- **Hazard statements**
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H319 Causes serious eye irritation.
Trade name: Cannabichromene (CBC) Standard -1mL

- **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.
  - P233 Keep container tightly closed.
  - P240 Ground and bond container and receiving equipment.
  - P241 Use explosion-proof [electrical/ventilating/ lighting] equipment.
  - P242 Use non-sparking tools.
  - P243 Take action to prevent static discharges.
  - P264 Wash thoroughly after handling.
  - P270 Do not eat, drink or smoke when using this product.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  - P330 Rinse mouth.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**
- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

### 3 Composition/information on ingredients

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

#### Dangerous components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>Description</th>
<th>Acetone/terile</th>
<th>99.8728%</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8</td>
<td>200-835-2</td>
<td>Flam. Liq. 2, H225:</td>
<td>Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319</td>
<td></td>
</tr>
</tbody>
</table>

- **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:**
  - Immediately remove any clothing soiled by the product.
  - 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:** Immediately rinse with water.
  - **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
### 5 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **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:**
  - Dilute with plenty of water.
  - 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).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.

- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe 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:**
  - 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:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-05-8 acetonitrile</td>
<td>102 mg/m³, 60 ppm</td>
<td>68 mg/m³, 40 ppm</td>
</tr>
</tbody>
</table>

- 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:
  When used as intended with Agilent instruments the use of the product under normal laboratory conditions and
  with standard practices does not result in significant airborne exposures and therefore respiratory protection is not
  needed.
  Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved
  device equipment with appropriate organic or acid gas cartridge.

- Protection of hands:
  Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil
  thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct
  contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times
  exceeding 4 hrs. Supplier recommendations should be followed.

- Material of gloves
  For normal use: nitrile rubber, 11-13 mil thickness
  For direct contact with the chemical: butyl rubber, 12-15 mil thickness

- Penetration time of glove material
  For normal use: nitrile rubber: 1 hour
  For direct contact with the chemical: butyl rubber: > 4 hours

- Eye protection:

  Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:
  Form: Fluid
  Colour: Colourless
###贸易名称：Cannabichromene (CBC) Standard -1mL

<table>
<thead>
<tr>
<th>特性</th>
<th>详情</th>
</tr>
</thead>
<tbody>
<tr>
<td>气味（Odour）</td>
<td>芳香</td>
</tr>
<tr>
<td>气味阈值（Odour threshold）</td>
<td>未确定</td>
</tr>
<tr>
<td>pH值（pH-value）</td>
<td>未确定</td>
</tr>
<tr>
<td>状态变化</td>
<td></td>
</tr>
<tr>
<td>熔点/凝固点（Melting point/freezing point）</td>
<td>-46 °C</td>
</tr>
<tr>
<td>初始沸点及沸程（Initial boiling point and boiling range）</td>
<td>81 °C</td>
</tr>
<tr>
<td>闪点（Flash point）</td>
<td>2 °C</td>
</tr>
<tr>
<td>固体和气体的易燃性（Flammability (solid, gas)）</td>
<td>未适用</td>
</tr>
<tr>
<td>点燃温度（Ignition temperature）</td>
<td>525 °C</td>
</tr>
<tr>
<td>分解温度（Decomposition temperature）</td>
<td>未确定</td>
</tr>
<tr>
<td>自燃温度（Auto-ignition temperature）</td>
<td>产品非自燃</td>
</tr>
<tr>
<td>爆炸性质（Explosive properties）</td>
<td>产品非爆炸。然而，爆炸性空气/蒸汽混合物是可能的。</td>
</tr>
<tr>
<td>爆炸极限（Explosion limits）</td>
<td>低限：4.4 Vol %  高限：16 Vol %</td>
</tr>
<tr>
<td>沸点气体压力（Vapour pressure at 20 °C）</td>
<td>0 hPa</td>
</tr>
<tr>
<td>20 °C密度（Density at 20 °C）</td>
<td>0.786 g/cm³</td>
</tr>
<tr>
<td>相对密度（Relative density）</td>
<td>未确定</td>
</tr>
<tr>
<td>蒸气密度（Vapour density）</td>
<td>未确定</td>
</tr>
<tr>
<td>蒸发速率（Evaporation rate）</td>
<td>未确定</td>
</tr>
<tr>
<td>溶解性（Solubility in / Miscibility with water）</td>
<td>完全混溶</td>
</tr>
<tr>
<td>n-octanol/water分配系数（Partition coefficient: n-octanol/water）</td>
<td>未确定</td>
</tr>
<tr>
<td>粘度（Viscosity）</td>
<td></td>
</tr>
<tr>
<td>动态粘度（Dynamic at 20 °C）</td>
<td>0.39 mPas</td>
</tr>
<tr>
<td>静态粘度（Kinematic）</td>
<td>未确定</td>
</tr>
<tr>
<td>挥发性含量（Solvent content）</td>
<td>VOC (EC)：0.00 %</td>
</tr>
<tr>
<td>固体含量（Solids content）</td>
<td>0.0 %</td>
</tr>
<tr>
<td>其他信息（Other information）</td>
<td>无进一步相关信息可提供</td>
</tr>
</tbody>
</table>

###10 稳定性和反应性

- **反应性**：无进一步相关信息可提供。
- **化学稳定性**：
  - 热分解/应避免的条件 **Thermal decomposition / conditions to be avoided**：如果按照规格使用，则无分解。
  - 危险反应可能性 **Possibility of hazardous reactions**：无已知的危险反应。
  - 避免条件 **Conditions to avoid**：无进一步相关信息可提供。
  - 不相容材料 **Incompatible materials**：无进一步相关信息可提供。
11 Toxicological information

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

- LD/LC50 values relevant for classification:
  ATE (Acute Toxicity Estimates)
<table>
<thead>
<tr>
<th>Oral</th>
<th>LD50</th>
<th>1,322 mg/kg (rat)</th>
</tr>
</thead>
</table>
  75-05-8 acetonitrile
  | Oral   | LD50    | 1,320 mg/kg (rat) |
  | Dermal | LD50    | >2,000 mg/kg (rabbit) |
  | Inhalative | LC50/4 h | 3,587 mg/L (mouse) |

- Primary irritant effect:
  - Skin corrosion/irritation
    Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation
    Causes serious eye irritation.
  - Respiratory or skin sensitisation
    Based on available data, the classification criteria are not met.
  - 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.
  - Additional ecological information:
  - General notes:
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
  - 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
  - HP3 Flammable
  - HP4 Irritant - skin irritation and eye damage
  - HP6 Acute Toxicity

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- Not Regulated, De minimus Quantities

- UN-Number
  - ADR, IMDG, IATA UN1648

- UN proper shipping name
  - ADR 1648 ACETONITRILE
  - IMDG, IATA ACETONITRILE

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

- Packing group
  - ADR, IMDG, IATA II

- Environmental hazards:
  Not applicable.

- Special precautions for user
  - Warning: Flammable liquids.
    - EMS Number: 3-02
    - 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: Cannabichromene (CBC) Standard - 1mL

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

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 P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements: 5,000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements: 50,000 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

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H312 Harmful in contact with skin.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.

- 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. 4: Acute toxicity - oral – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2