1 Identification

- Product identifier
- **Product name:** Agilent Blood Alcohol Checkout mix
- **Part number:** 5190-9765
- **Application of the substance / the mixture** Reference material for laboratory use only
- **Manufacturer/Supplier:**
  Agilent Technologies, Inc.  
  5301 Stevens Creek Blvd.  
  Santa Clara, CA 95051  
  USA
- **Information department:** e-mail: pdl-msds_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
  - **GHS label elements** Not applicable
  - **Hazard pictograms** Not applicable
  - **Signal word** Not applicable
  - **Hazard statements** Not applicable
- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - HEALTH 0
    - FIRE 0
    - REACTIVITY 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture: consisting of the following components.

(Contd. on page 2)
4 First-aid measures

- Description of first-aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Rinse mouth. Do not induce vomiting.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
- Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 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: Store in cool, dry place in tightly closed receptacles.
- Information about protection against explosions and fires: No special measures required.
Product name: Agilent Blood Alcohol Checkout mix

- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles:
    - Store in a cool location.
    - Please refer to the manufacturers certificate for specific storage and transport temperature conditions.
    - Store only in the original receptacle.
    - Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
  - Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
  - Components with limit values that require monitoring at the workplace:
    - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      - The usual precautionary measures for handling chemicals should be followed.
    - Breathing equipment: Not required.
    - Protection of hands:
      - Chemical-resistant, impervious gloves with an approved standards should be worn at all times.
      - The selection of the glove material is based on the penetration times, rates of diffusion and its degradation
      - Material of gloves Nitrile rubber, NBR
      - Penetration time of glove material
        - The protection time of the gloves can not be accurately estimated for mixtures consisting of several substances.
        - Refer to and observe manufacturers break through times of the protective gloves.
      - Eye protection: Safety glasses

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Liquid
## 10 Stability and reactivity

- **Reactivity**: Stable under normal conditions.
- **Chemical stability**: Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided**: Formation of toxic gases is possible during heating or in case of fire.
- **Possibility of hazardous reactions**: No dangerous reactions known.

### 43.0

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td>Flash point</td>
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</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C (68 °F)</td>
<td>23 hPa (17 mm Hg)</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F)</td>
<td>0.99882 g/cm³ (8.335 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>VOC content</td>
<td>0.3 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
Conditions to avoid: Heat.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Formation of toxic gases is possible during heating or in case of fire.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
  - on the skin: Based on available data, the classification criteria are not met.
  - on the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- Additional toxicological information:
  The product is not subject to classification according to internally approved calculation methods for preparations:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- Carcinogenic categories

  - IARC (International Agency for Research on Cancer)
    - 75-07-0 Acetaldehyde 2B
    - 64-17-5 Ethanol 1
    - 67-63-0 Propan-2-ol 3
  - NTP (National Toxicology Program)
    - 75-07-0 Acetaldehyde R
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
  - Additional ecological information:
  - General notes: Generally not hazardous for water
  - Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
**Product name:** Agilent Blood Alcohol Checkout mix

(Contd. of page 5)

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
  - **Recommendation:** Dispose in accordance with national regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

<table>
<thead>
<tr>
<th>DOT, ADR, ADN, IMDG, IATA</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Environment hazards:

- Not applicable.

### Special precautions for user

- Not applicable.

### Transport/Additional information:

- Not dangerous according to the above specifications.

### UN "Model Regulation":

- Not applicable.

### 15 Regulatory information

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

- **Sara**

  - **Section 355 (extremely hazardous substances):**
    - None of the ingredients is listed.

  - **Section 313 (Specific toxic chemical listings):**
    - 75-07-0 Acetaldehyde
    - 67-63-0 Propan-2-ol

(Contd. on page 7)
**Product name:** Agilent Blood Alcohol Checkout mix

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-65-0</td>
<td>2-methylpropan-2-ol</td>
</tr>
<tr>
<td>123-38-6</td>
<td>Propanaldehyde</td>
</tr>
<tr>
<td>75-05-8</td>
<td>Acetonitrile</td>
</tr>
<tr>
<td>78-92-2</td>
<td>2-Butanol</td>
</tr>
<tr>
<td>78-93-3</td>
<td>Butanone</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
</tr>
</tbody>
</table>

- **TSCA (Toxic Substances Control Act):**
  All ingredients are listed.

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - 75-07-0 Acetaldehyde

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  - 67-56-1 Methanol

- **EPA (Environmental Protection Agency)**
  - 75-07-0 Acetaldehyde B2
  - 123-38-6 Propanaldehyde II
  - 67-64-1 Acetone I
  - 75-05-8 Acetonitrile CBD, D
  - 78-93-3 Butanone I

- **TLV (Threshold Limit Value established by ACGIH)**
  - 75-07-0 Acetaldehyde A3
  - 67-63-0 Propan-2-ol A4
  - 75-65-0 2-methylpropan-2-ol A4
  - 71-23-8 Propan-1-ol A4
  - 67-64-1 Acetone A4
  - 75-05-8 Acetonitrile A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - 75-07-0 Acetaldehyde A4

- **GHS label elements** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
Product name: Agilent Blood Alcohol Checkout mix

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

- **Date of preparation / last revision:** 12/13/2016 / -
- **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
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - 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)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
- **Sources:**
  - **Data compared to the previous version altered:** All sections have been updated.