1 Identification

- Product identifier
  - Trade name: Custom Standard
- Part number: CUS-8713
- Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: ULTRA Scientific, Inc.
    250 Smith Street
    North Kingstown, RI 02852
    USA
  - Information department:
    Telephone: (401) 294-9400
    Fax: (401) 295-2300
    E-mail: regulatory@ultrasci.com
  - Emergency telephone number:
    US: +1-800-424-9300
    Outside US: +1-703-527-3887

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 Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - 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 of the substances listed below with nonhazardous additions.

(Contd. on page 2)
Trade name: Custom Standard

- Dangerous components: Void

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **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.
- **After swallowing:** If symptoms persist consult doctor.
- **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 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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** Not required.
- **Environmental precautions:** No special measures required.
- **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.
- **Protective Action Criteria for Chemicals**

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75-65-0</td>
<td>2-methylpropan-2-ol</td>
<td>150 ppm</td>
</tr>
<tr>
<td>123-38-6</td>
<td>propanal</td>
<td>45 ppm</td>
</tr>
<tr>
<td>75-07-0</td>
<td>acetaldehyde</td>
<td>45 ppm</td>
</tr>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>530 ppm</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>1,800 ppm</td>
</tr>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
<td>400 ppm</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>200 ppm</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>200 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75-65-0</td>
<td>2-methylpropan-2-ol</td>
<td>1,300 ppm</td>
</tr>
<tr>
<td>123-38-6</td>
<td>propanal</td>
<td>260 ppm</td>
</tr>
<tr>
<td>75-07-0</td>
<td>acetaldehyde</td>
<td>270 ppm</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>2,100</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>3300*</td>
</tr>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
<td>2000*</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>3200*</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>2700*</td>
</tr>
<tr>
<td>PAC-3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-65-0</td>
<td>2-methylpropan-2-ol</td>
<td>8000*</td>
</tr>
<tr>
<td>123-38-6</td>
<td>propanal</td>
<td>840</td>
</tr>
<tr>
<td>75-07-0</td>
<td>acetaldehyde</td>
<td>840</td>
</tr>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>7200*</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>15000*</td>
</tr>
<tr>
<td>67-63-0</td>
<td>propan-2-ol</td>
<td>12000**</td>
</tr>
<tr>
<td>67-64-1</td>
<td>acetone</td>
<td>5700*</td>
</tr>
<tr>
<td>78-93-3</td>
<td>butanone</td>
<td>4000*</td>
</tr>
</tbody>
</table>

7 Handling and storage

• Handling:
  • Precautions for safe handling: No special measures required.
  • Information about protection against explosions and fires: No special measures required.

• Conditions for safe storage, including any incompatibilities

• Storage:
  • Requirements to be met by storerooms and receptacles: No special requirements.
  • Information about storage in one common storage facility: Not required.
  • 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: Not required.
  • 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.
Trade name: Custom Standard

- 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.
- Eye protection: Goggles recommended during refilling.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form:                      Fluid</td>
<td></td>
</tr>
<tr>
<td>Color:                     Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor:                      Odorless</td>
<td></td>
</tr>
<tr>
<td>Odor threshold:            Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>pH-value:</strong>              Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td><strong>Flash point:</strong>            Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:                    Not determined.</td>
<td></td>
</tr>
<tr>
<td>Upper:                    Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>Vapor pressure at 20 °C (68 °F):</strong></td>
<td>23 hPa (17.3 mm Hg)</td>
</tr>
<tr>
<td><strong>Density at 20 °C (68 °F):</strong></td>
<td>0.99917 g/cm³ (8.33807 lbs/gal)</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Water:                    Not miscible or difficult to mix.</td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic at 20 °C (68 °F):</td>
<td>0.952 mPas</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.3 %</td>
</tr>
<tr>
<td>Water:                    99.6 %</td>
<td></td>
</tr>
<tr>
<td>VOC content:</td>
<td>0.20 %</td>
</tr>
<tr>
<td>2.0 g/l / 0.02 lb/gl</td>
<td></td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>0.1 %</td>
</tr>
</tbody>
</table>
Trade name: Custom Standard

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**:
  - **Primary irritant effect**:
    - **on the skin**: No irritant effect.
    - **on the eye**: No irritating effect.
  - **Sensitization**: No sensitizing effects known.
- **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.
13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Smaller quantities can be disposed of with household waste.

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

14 Transport information

- **UN-Number**
  - DOT, IMDG, IATA: not regulated

- **UN proper shipping name**
  - DOT, IMDG, IATA: not regulated

- **Transport hazard class(es)**
  - DOT, IMDG, IATA: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

- **Environmental hazards:**
  - Not applicable.

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation":**
  - not regulated

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):**
    - 75-65-0 2-methylpropan-2-ol
    - 123-38-6 propanal
    - 75-07-0 acetaldehyde
    - 67-56-1 methanol
    - 67-63-0 propan-2-ol
    - 78-93-3 butanone

  - **TSCA (Toxic Substances Control Act):**
    - All ingredients are listed.
Trade name: Custom Standard

- **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
  - 64-17-5 ethanol

- **Carcinogenic categories**

  - **EPA (Environmental Protection Agency)**
    - 123-38-6 propanal II
    - 75-07-0 acetaldehyde B2
    - 67-64-1 acetone I
    - 78-93-3 butanone I

  - **TLV (Threshold Limit Value established by ACGIH)**
    - 75-65-0 2-methylpropan-2-ol A4
    - 75-07-0 acetaldehyde A3
    - 64-17-5 ethanol A3
    - 67-63-0 propan-2-ol A4
    - 67-64-1 acetone A4

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

- **GHS label elements** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **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.

- **Date of preparation / last revision** 06/20/2018 / -

- **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

(Contd. on page 8)
### Trade name: Custom Standard

NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit