1 Identification

- **Product identifier**
- **Trade name:** Custom Standard
- **Part number:** CUS-8424
- **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**
  - GHS02 Flame
    Flam. Liq. 2  H225  Highly flammable liquid and vapor.
  - GHS06 Skull and crossbones
    Acute Tox. 3  H331  Toxic if inhaled.
  - GHS08 Health hazard
    STOT SE 1  H370  Causes damage to organs.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS02
    - GHS06
    - GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - methanol
- **Hazard statements**
  - Highly flammable liquid and vapor.
  - Toxic if inhaled.
Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Specific treatment (see on this label).
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

- **NFPA ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 3
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - Health = *1
  - Fire = 3
  - 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.

**Dangerous components:**

<table>
<thead>
<tr>
<th>Chemical Code</th>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>99.971%</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of first aid measures
- General information:
  - Immediately remove any clothing soiled by the product.
  - Remove breathing apparatus only after contaminated clothing have been completely removed.
  - In case of irregular breathing or respiratory arrest provide artificial respiration.
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.
- **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:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** 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.
- **Protective Action Criteria for Chemicals**

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>methanol</td>
</tr>
<tr>
<td>122-39-4</td>
<td>diphenylamine</td>
</tr>
<tr>
<td>82-68-8</td>
<td>quintozene (ISO)</td>
</tr>
<tr>
<td>86-50-0</td>
<td>azinphos-methyl (ISO)</td>
</tr>
<tr>
<td>298-04-4</td>
<td>disulfoton</td>
</tr>
<tr>
<td>22224-92-6</td>
<td>fenamiphos (ISO)</td>
</tr>
<tr>
<td>2032-65-7</td>
<td>mercaptodimethur (ISO)</td>
</tr>
<tr>
<td>950-37-8</td>
<td>methidathion</td>
</tr>
<tr>
<td>6923-22-4</td>
<td>monocrotophos (ISO)</td>
</tr>
<tr>
<td>7786-34-7</td>
<td>mevinphos (ISO)</td>
</tr>
<tr>
<td>56-38-2</td>
<td>parathion (ISO)</td>
</tr>
<tr>
<td>52-68-6</td>
<td>trichlorfon (ISO)</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
### 7 Handling and storage

**Handling:**

- **Precautions for safe handling**
  Ensure good ventilation/exhaustion at the workplace.
  Open and handle receptacle with care.

- **Information about protection against explosions and fires:**
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
  Keep respiratory protective device available.

**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 receptacle tightly sealed.
  Store in cool, dry conditions in well sealed receptacles.

---

#### PAC-2:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>2,100 ppm</td>
</tr>
<tr>
<td>122-39-4</td>
<td>diphenylamine</td>
<td>180 mg/m³</td>
</tr>
<tr>
<td>82-68-8</td>
<td>quintozene (ISO)</td>
<td>28 mg/m³</td>
</tr>
<tr>
<td>86-50-0</td>
<td>azinphos-methyl (ISO)</td>
<td>0.7 mg/m³</td>
</tr>
<tr>
<td>298-04-4</td>
<td>disulfoton</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>22224-92-6</td>
<td>fenamiphos (ISO)</td>
<td>0.9 mg/m³</td>
</tr>
<tr>
<td>2032-65-7</td>
<td>mercaptodimethur (ISO)</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td>950-37-8</td>
<td>methidathion</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>6923-22-4</td>
<td>monocrotophos (ISO)</td>
<td>0.63 mg/m³</td>
</tr>
<tr>
<td>7786-34-7</td>
<td>mevinphos (ISO)</td>
<td>4 mg/m³</td>
</tr>
<tr>
<td>56-38-2</td>
<td>parathion (ISO)</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>52-68-6</td>
<td>trichlorfon (ISO)</td>
<td>13 mg/m³</td>
</tr>
</tbody>
</table>

#### PAC-3:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>methanol</td>
<td>7200* ppm</td>
</tr>
<tr>
<td>122-39-4</td>
<td>diphenylamine</td>
<td>220 mg/m³</td>
</tr>
<tr>
<td>82-68-8</td>
<td>quintozene (ISO)</td>
<td>62 mg/m³</td>
</tr>
<tr>
<td>86-50-0</td>
<td>azinphos-methyl (ISO)</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>298-04-4</td>
<td>disulfoton</td>
<td>8.8 mg/m³</td>
</tr>
<tr>
<td>22224-92-6</td>
<td>fenamiphos (ISO)</td>
<td>3.1 mg/m³</td>
</tr>
<tr>
<td>2032-65-7</td>
<td>mercaptodimethur (ISO)</td>
<td>90 mg/m³</td>
</tr>
<tr>
<td>950-37-8</td>
<td>methidathion</td>
<td>160 mg/m³</td>
</tr>
<tr>
<td>6923-22-4</td>
<td>monocrotophos (ISO)</td>
<td>3.5 mg/m³</td>
</tr>
<tr>
<td>7786-34-7</td>
<td>mevinphos (ISO)</td>
<td>40 mg/m³</td>
</tr>
<tr>
<td>56-38-2</td>
<td>parathion (ISO)</td>
<td>2.0 mg/m³</td>
</tr>
<tr>
<td>52-68-6</td>
<td>trichlorfon (ISO)</td>
<td>57 mg/m³</td>
</tr>
</tbody>
</table>
8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1 methanol</td>
</tr>
<tr>
<td>PEL Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>REL Short-term value: 325 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>TLV Short-term value: 328 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>Long-term value: 262 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin; BEI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients with biological limit values:</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1 methanol</td>
</tr>
<tr>
<td>BEI 15 mg/L</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: end of shift</td>
</tr>
<tr>
<td>Parameter: Methanol (background, nonspecific)</td>
</tr>
</tbody>
</table>

· Additional information: The lists that were valid during the creation 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.
  Store protective clothing separately.

· Breathing equipment:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· 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.

· 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:
  Tightly sealed goggles
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Color: Colorless
    - Odor: Alcohol-like
    - Odor threshold: Not determined.
  - pH-value: Not determined.
  - Change in condition
    - Melting point/Melting range: -98 °C (-144.4 °F)
    - Boiling point/Boiling range: 64.7 °C (148.5 °F)
  - Flash point: 9 °C (48.2 °F)
  - Flammability (solid, gaseous): Not applicable.
  - Ignition temperature: 455 °C (851 °F)
  - Decomposition temperature: Not determined.
  - Auto igniting: Product is not selfigniting.
  - Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
  - Explosion limits:
    - Lower: 5.5 Vol %
    - Upper: 44 Vol %
  - Vapor pressure at 20 °C (68 °F): 100 hPa (75 mm Hg)
  - Density at 20 °C (68 °F): 0.8 g/cm³ (6.676 lbs/gal)
  - Relative density: Not determined.
  - Vapor 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: Not determined.
    - Kinematic: Not determined.
  - Solvent content:
    - Organic solvents: 100.0 %
    - VOC content: 99.98 %
      - 999.8 g/l / 8.34 lb/gl
  - Solids content: 0.0 %
  - Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity No further relevant information available.
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    ATE (Acute Toxicity Estimate)
    Inhalative LC50/4 h 3 mg/L

67-56-1 methanol
Oral LD50 5,628 mg/kg (rat)
Dermal LD50 15,800 mg/kg (rabbit)

52918-63-5 deltamethrin (ISO)
Oral LD50 9.36 mg/kg (rat)
Dermal LD50 2,000 mg/kg (rabbit)

22224-92-6 fenamiphos (ISO)
Oral LD50 10 mg/kg (rat)
Dermal LD50 80 mg/kg (rat)
Inhalative LC50/4 h 91 mg/L (rat)

7786-34-7 mevinphos (ISO)
Oral LD50 3 mg/kg (rat)
Dermal LD50 4 mg/kg (rat)

56-38-2 parathion (ISO)
Oral LD50 2 mg/kg (rat)
Dermal LD50 6.8 mg/kg (rat)

52-68-6 trichlorfon (ISO)
Oral LD50 882 mg/kg (rat)
Dermal LD50 2,000 mg/kg (rat)

- 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 shows the following dangers according to internally approved calculation methods for preparations:
  Toxic

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    52918-63-5 deltamethrin (ISO) 3
    51630-58-1 fenvalerate 3
    82-68-8 quintozene (ISO) 3
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:
  Water hazard class 1 (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 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 of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  DOT, IMDG, IATA: UN1230
- UN proper shipping name
  - DOT: Methanol solution
  - IMDG: METHANOL solution, MARINE POLLUTANT
  - IATA: METHANOL solution
47.0

Transport hazard class(es)

- DOT

  - Class
    - 3 Flammable liquids
  - Label
    - 3, 6.1

- IMDG

  - Class
    - 3 Flammable liquids
  - Label
    - 3/6.1

- IATA

  - Class
    - 3 Flammable liquids
  - Label
    - 3 (6.1)

Packing group

- DOT, IMDG, IATA
  - II

Environmental hazards:

- Product contains environmentally hazardous substances: vamidothion, deltamethrin (ISO)
- Marine pollutant:
  - Symbol (fish and tree)

Special precautions for user

- Warning: Flammable liquids
- Danger code (Kemler): 336
- EMS Number: F-E, S-D
- Stowage Category: B
- Stowage Code: SW2 Clear of living quarters.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- Not applicable.

Transport/Additional information:

- DOT
  - Quantity limitations
    - On passenger aircraft/rail: 1 L
    - On cargo aircraft only: 60 L

- 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

(Contd. on page 10)
## Safety Data Sheet
### acc. to OSHA HCS

**Trade name:** Custom Standard

| UN "Model Regulation": | UN 1230 METHANOL SOLUTION, 3 (6.1), II, ENVIRONMENTALLY HAZARDOUS |

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### 15 Regulatory information

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

**Section 355 (extremely hazardous substances):**
- 86-50-0 azinphos-methyl (ISO)
- 298-04-4 disulfoton
- 2022-92-6 fenamiphos (ISO)
- 2032-65-7 mercaptodimethur (ISO)
- 950-37-8 methidathion
- 6923-22-4 monocrotophos (ISO)
- 7786-34-7 mevinphos (ISO)
- 56-38-2 parathion (ISO)

**Section 313 (Specific toxic chemical listings):**
- 67-56-1 methanol
- 51630-58-1 fenvalerate
- 133-07-3 folpet (ISO)
- 122-39-4 diphenylamine
- 82-68-8 quintozene (ISO)
- 2032-65-7 mercaptodimethur (ISO)
- 7786-34-7 mevinphos (ISO)
- 56-38-2 parathion (ISO)
- 50471-44-8 vinclozolin (ISO)
- 52-68-6 trichlorfon (ISO)

**TSCA (Toxic Substances Control Act):**
- 67-56-1 methanol
- 133-07-3 folpet (ISO)
- 122-39-4 diphenylamine
- 82-68-8 quintozene (ISO)
- 91-53-2 ethoxyquin

**Proposition 65**

- **Chemicals known to cause cancer:**
  - 133-07-3 folpet (ISO)
  - 56-38-2 parathion (ISO)
  - 50471-44-8 vinclozolin (ISO)

- **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.
Trade name: Custom Standard

- Chemicals known to cause developmental toxicity:
  - 67-56-1 methanol
  - 50471-44-8 vinclozolin (ISO)

- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    - 311-45-5 paraoxon D
    - 56-38-2 parathion (ISO) C
  - TLV (Threshold Limit Value established by ACGIH)
    - 122-39-4 diphenylamine A4
    - 82-68-8 quintozene (ISO) A4
    - 86-50-0 azinphos-methyl (ISO) A4
    - 298-04-4 disulfoton A4
    - 22224-92-6 fenamiphos (ISO) A4
    - 6923-22-4 monocrotophos (ISO) A4
    - 7786-34-7 mevinphos (ISO) A4
    - 56-38-2 parathion (ISO) A4
    - 52-68-6 trichlorfon (ISO) A4
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.

- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  - GHS02  GHS06  GHS08

- Signal word
  - Danger

- Hazard-determining components of labeling:
  - methanol

- Hazard statements
  - Highly flammable liquid and vapor.
  - Toxic if inhaled.
  - Causes damage to organs.

- Precautionary statements
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Ground/bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Do not breathe dust/fume/gas/mist/vapors/spray.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - Use only outdoors or in a well-ventilated area.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - Specific treatment (see on this label).
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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**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** 06/01/2018 / -
- **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)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - 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
  - BEI: Biological Exposure Limit
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 3: Acute toxicity – Category 3
  - STOT SE 1: Specific target organ toxicity (single exposure) – Category 1