1 Identification

- Product identifier
- Trade name: Tune-D25 Cross Cal Solution
- Part number: 1600636
- Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Agilent Technologies, Inc.
    5301 Stevens Creek Blvd.
    Santa Clara, CA  95051  USA
  - Information department:
    Telephone: 800-227-9770
    e-mail: pdl-mds_author@agilent.com
  - Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS05 Corrosion
    Skin Corr. 1B  H314  Causes severe skin burns and eye damage.
    Eye Dam. 1  H318  Causes serious eye damage.
- Label elements
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS05
- Signal word Danger
- Hazard-determining components of labeling: nitric acid
- Hazard statements
  Causes severe skin burns and eye damage.
- Precautionary statements
  Do not breathe dusts or mists.
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  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.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
  Continue rinsing.
  Immediately call a poison center/doctor.
  Specific treatment (see on this label).
  Wash contaminated clothing before reuse.
  Store locked up.

(Contd. on page 2)
Trade name: Tune-D25 Cross Cal Solution

- Dispose of contents/container in accordance with local/regional/national/international regulations.
  - Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 3
    - Fire = 0
    - Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    - Health = 3
    - 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.
- Dangerous components:
  - 7697-37-2 nitric acid 5.0%

4 First-aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a 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
  - During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.
6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures**
  Mount respiratory protective device.
  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).
  Use neutralizing agent.
  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>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7697-37-2 nitric acid</td>
<td>0.16 ppm</td>
</tr>
<tr>
<td>13446-18-9 magnesium nitrate hexahydrate</td>
<td>16 mg/m³</td>
</tr>
<tr>
<td>7784-27-2 aluminium nitrate</td>
<td>83 mg/m³</td>
</tr>
<tr>
<td>7803-55-6 ammonium trioxovanadate</td>
<td>0.01 mg/m³</td>
</tr>
<tr>
<td>10377-66-9 manganese dinitrate</td>
<td>9.8 mg/m³</td>
</tr>
<tr>
<td>7782-61-8 iron (III) nitrate nonahydrate</td>
<td>22 mg/m³</td>
</tr>
<tr>
<td>10026-22-9 cobalt (II) nitrate hexahydrate</td>
<td>0.3 mg/m³</td>
</tr>
<tr>
<td>13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>3251-23-8 copper dinitrate</td>
<td>8.9 mg/m³</td>
</tr>
<tr>
<td>10196-18-6 zinc(II) nitrate hexahydrate</td>
<td>27 mg/m³</td>
</tr>
<tr>
<td>1327-53-3 diarsenic trioxide</td>
<td>0.27 mg/m³</td>
</tr>
<tr>
<td>7446-08-4 selenium dioxide</td>
<td>0.84 mg/m³</td>
</tr>
<tr>
<td>1313-27-5 molybdenum trioxide</td>
<td>2.3 mg/m³</td>
</tr>
<tr>
<td>10022-68-1 Nitric acid, cadmium salt, tetrahydrate</td>
<td>0.27 mg/m³</td>
</tr>
<tr>
<td>1312-43-2 diindium trioxide</td>
<td>0.36 mg/m³</td>
</tr>
<tr>
<td>10022-31-8 barium nitrate</td>
<td>2.9 mg/m³</td>
</tr>
<tr>
<td>10102-45-1 thallium nitrate</td>
<td>0.078 mg/m³</td>
</tr>
<tr>
<td>10099-74-8 lead dinitrate</td>
<td>0.24 mg/m³</td>
</tr>
<tr>
<td>13520-83-7 uranyl nitrate, hexahydrate</td>
<td>1.3 mg/m³</td>
</tr>
<tr>
<td>554-13-2 lithium carbonate</td>
<td>3.1 mg/m³</td>
</tr>
<tr>
<td>471-34-1 calcium carbonate</td>
<td>45 mg/m³</td>
</tr>
<tr>
<td>7757-79-1 potassium nitrate</td>
<td>9 mg/m³</td>
</tr>
<tr>
<td>7631-99-4 sodium nitrate</td>
<td>4.1 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7697-37-2 nitric acid</td>
<td>24 ppm</td>
</tr>
<tr>
<td>13446-18-9 magnesium nitrate hexahydrate</td>
<td>180 mg/m³</td>
</tr>
<tr>
<td>7784-27-2 aluminium nitrate</td>
<td>920 mg/m³</td>
</tr>
</tbody>
</table>
## Trade name: Tune-D25 Cross Cal Solution

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7803-55-6</td>
<td>ammonium trioxovanadate</td>
<td>0.11 mg/m³</td>
</tr>
<tr>
<td>10377-66-9</td>
<td>manganese dinitrate</td>
<td>16 mg/m³</td>
</tr>
<tr>
<td>7782-61-8</td>
<td>iron (III) nitrate nonahydrate</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td>10026-22-9</td>
<td>cobalt (II) nitrate hexahydrate</td>
<td>23 mg/m³</td>
</tr>
<tr>
<td>13478-00-7</td>
<td>Nitric acid, nickel(2+) salt, hexahydrate</td>
<td>53 mg/m³</td>
</tr>
<tr>
<td>3251-23-8</td>
<td>copper dinitrate</td>
<td>31 mg/m³</td>
</tr>
<tr>
<td>10196-18-6</td>
<td>zinc(II) nitrate hexahydrate</td>
<td>300 mg/m³</td>
</tr>
<tr>
<td>1327-53-3</td>
<td>diarsenic trioxide</td>
<td>3.0 mg/m³</td>
</tr>
<tr>
<td>7446-08-4</td>
<td>selenium dioxide</td>
<td>1.6 mg/m³</td>
</tr>
<tr>
<td>1313-27-5</td>
<td>molybdenum trioxide</td>
<td>43 mg/m³</td>
</tr>
<tr>
<td>10022-68-1</td>
<td>Nitric acid, cadmium salt, tetrahydrate</td>
<td>2.1 mg/m³</td>
</tr>
<tr>
<td>1312-43-2</td>
<td>diindium trioxide</td>
<td>4.8 mg/m³</td>
</tr>
<tr>
<td>10022-31-8</td>
<td>barium nitrate</td>
<td>350 mg/m³</td>
</tr>
<tr>
<td>10102-45-1</td>
<td>thallium nitrate</td>
<td>43 mg/m³</td>
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<tr>
<td>10099-74-8</td>
<td>lead dinitrate</td>
<td>180 mg/m³</td>
</tr>
<tr>
<td>13520-83-7</td>
<td>uranyl nitrate, hexahydrate</td>
<td>7 mg/m³</td>
</tr>
<tr>
<td>554-13-2</td>
<td>lithium carbonate</td>
<td>34 mg/m³</td>
</tr>
<tr>
<td>471-34-1</td>
<td>calcium carbonate</td>
<td>210 mg/m³</td>
</tr>
<tr>
<td>7757-79-1</td>
<td>potassium nitrate</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td>7631-99-4</td>
<td>sodium nitrate</td>
<td>45 mg/m³</td>
</tr>
</tbody>
</table>

**PAC-3:**

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7697-37-2</td>
<td>nitric acid</td>
<td>92 ppm</td>
</tr>
<tr>
<td>13446-18-9</td>
<td>magnesium nitrate hexahydrate</td>
<td>1,100 mg/m³</td>
</tr>
<tr>
<td>7784-27-2</td>
<td>aluminium nitrate</td>
<td>5,500 mg/m³</td>
</tr>
<tr>
<td>7803-55-6</td>
<td>ammonium trioxovanadate</td>
<td>80 mg/m³</td>
</tr>
<tr>
<td>10377-66-9</td>
<td>manganese dinitrate</td>
<td>96 mg/m³</td>
</tr>
<tr>
<td>7782-61-8</td>
<td>iron (III) nitrate nonahydrate</td>
<td>640 mg/m³</td>
</tr>
<tr>
<td>10026-22-9</td>
<td>cobalt (II) nitrate hexahydrate</td>
<td>140 mg/m³</td>
</tr>
<tr>
<td>13478-00-7</td>
<td>Nitric acid, nickel(2+) salt, hexahydrate</td>
<td>320 mg/m³</td>
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<tr>
<td>3251-23-8</td>
<td>copper dinitrate</td>
<td>190 mg/m³</td>
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<tr>
<td>10196-18-6</td>
<td>zinc(II) nitrate hexahydrate</td>
<td>1,800 mg/m³</td>
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<tr>
<td>1327-53-3</td>
<td>diarsenic trioxide</td>
<td>9.1 mg/m³</td>
</tr>
<tr>
<td>7446-08-4</td>
<td>selenium dioxide</td>
<td>9.5 mg/m³</td>
</tr>
<tr>
<td>1313-27-5</td>
<td>molybdenum trioxide</td>
<td>260 mg/m³</td>
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<tr>
<td>10022-68-1</td>
<td>Nitric acid, cadmium salt, tetrahydrate</td>
<td>13 mg/m³</td>
</tr>
<tr>
<td>1312-43-2</td>
<td>diindium trioxide</td>
<td>29 mg/m³</td>
</tr>
<tr>
<td>10022-31-8</td>
<td>barium nitrate</td>
<td>2,100 mg/m³</td>
</tr>
<tr>
<td>10102-45-1</td>
<td>thallium nitrate</td>
<td>26 mg/m³</td>
</tr>
<tr>
<td>10099-74-8</td>
<td>lead dinitrate</td>
<td>1,100 mg/m³</td>
</tr>
<tr>
<td>13520-83-7</td>
<td>uranyl nitrate, hexahydrate</td>
<td>42 mg/m³</td>
</tr>
<tr>
<td>554-13-2</td>
<td>lithium carbonate</td>
<td>210 mg/m³</td>
</tr>
</tbody>
</table>
Trade name: Tune-D25 Cross Cal Solution

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>471-34-1</td>
<td>calcium carbonate</td>
<td>1,300 mg/m³</td>
</tr>
<tr>
<td>7757-79-1</td>
<td>potassium nitrate</td>
<td>600 mg/m³</td>
</tr>
<tr>
<td>7631-99-4</td>
<td>sodium nitrate</td>
<td>270 mg/m³</td>
</tr>
</tbody>
</table>

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** Keep receptacle tightly sealed.
- **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:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Long-term value:</th>
<th>REL Short-term value:</th>
<th>TLV Short-term value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7697-37-2 nitric acid</td>
<td>5 mg/m³, 2 ppm</td>
<td>10 mg/m³, 4 ppm</td>
<td>5.2 mg/m³, 2 ppm</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.
      - Avoid contact with the eyes.
      - Avoid contact with the eyes and skin.
  - **Breathing equipment:**
    - 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 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is...
48.1.2 direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil 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
      - Color: According to product specification
      - Odor: Characteristic
      - Odor threshold: Not determined.
  - **pH-value:** Not determined.
  - **Change in condition**
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 83 °C (181.4 °F)
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not applicable.
  - **Decomposition temperature:** Not determined.
  - **Auto igniting:** Product is not selfigniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Vapor pressure:** Not determined.
  - **Density:** Not determined.
  - **Relative density**
  - **Vapor density**
  - **Evaporation rate**
  - **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
  - **Partition coefficient (n-octanol/water):** Not determined.
**Trade name: Tune-D25 Cross Cal Solution**

| · Viscosity:       | Not determined. |
|                   |                 |
| · Dynamic:        |                 |
| · Kinematic:      | Not determined. |
| · Solvent content:| Water: 95.0 %   |
|                   | VOC content: 0.00 % |
|                   | 0.0 g/l / 0.00 lb/gal |
| · Other information| No further relevant information available. |

**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:**
    - **LD/LC50 values that are relevant for classification:**
      - **ATE (Acute Toxicity Estimate)**
        - Inhalative LC50/4 h: 1,340 mg/L (rat)
      - **7697-37-2 nitric acid**
        - Inhalative LC50/4 h: 67 mg/L (rat)
  - **Primary irritant effect:**
    - **on the skin:** Caustic effect on skin and mucous membranes.
    - **on the eye:** Strong caustic effect. Strong irritant with the danger of severe eye injury.
  - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**
    - The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive Irritant Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - 10026-22-9 cobalt (II) nitrate hexahydrate 2B
    - 13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate 1
Trade name: Tune-D25 Cross Cal Solution

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1327-53-3</td>
<td>diarsenic trioxide</td>
<td>1</td>
</tr>
<tr>
<td>7446-08-4</td>
<td>selenium dioxide</td>
<td>3</td>
</tr>
<tr>
<td>10022-68-1</td>
<td>Nitric acid, cadmium salt, tetrahydrate</td>
<td>1</td>
</tr>
<tr>
<td>10099-74-8</td>
<td>lead dinitrate</td>
<td>2A</td>
</tr>
<tr>
<td>543-81-7</td>
<td>acetic acid beryllium salt</td>
<td>1</td>
</tr>
</tbody>
</table>

- **NTP (National Toxicology Program)**
  - 13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate K
  - 1327-53-3 diarsenic trioxide K
  - 10022-68-1 Nitric acid, cadmium salt, tetrahydrate K
  - 10099-74-8 lead dinitrate R
  - 543-81-7 acetic acid beryllium salt K

- **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**:
      - Water hazard class 2 (Self-assessment): hazardous for water
      - Do not allow product to reach ground water, water course or sewage system.
      - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
      - 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 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: UN3264

- **UN proper shipping name**
  - DOT, IMDG, IATA: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)

- **DOT, IMDG, IATA**
  - Class: 8 Corrosive substances
  - Label: 8

- **Packing group**
  - DOT, IMDG, IATA: III

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

- **Special precautions for user**
  - Warning: Corrosive substances
  - Danger code (Kemler): 80
  - EMS Number: F-A,S-B
  - Segregation groups: Acids
  - 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: 30 L

- **IMDG**
  - Limited quantities (LQ): 5L
  - Exceptional quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":**
  - UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID), 8, III
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
  - **Section 355 (extremely hazardous substances):**
    - 7697-37-2 nitric acid
    - 1327-53-3 diarsenic trioxide
  - **Section 313 (Specific toxic chemical listings):**
    - 7697-37-2 nitric acid
    - 13446-18-9 magnesium nitrate hexahydrate
    - 7784-27-2 aluminium nitrate
    - 7803-55-6 ammonium trioxovanadate
    - 7789-02-8 chromium (III) nitrate nonahydrate
    - 10377-66-9 manganese dinitrate
    - 7782-61-8 iron (III) nitrate nonahydrate
    - 10026-22-9 cobalt (II) nitrate hexahydrate
    - 13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate
    - 3251-23-8 copper dinitrate
    - 10196-18-6 zinc(II) nitrate hexahydrate
    - 1327-53-3 diarsenic trioxide
    - 7446-08-4 selenium dioxide
    - 1313-27-5 molybdenum trioxide
    - 10022-68-1 Nitric acid, cadmium salt, tetrahydrate
    - 10022-31-8 barium nitrate
    - 10102-45-1 thallium nitrate
    - 10099-74-8 lead dinitrate
    - 554-13-2 lithium carbonate
    - 543-81-7 acetic acid beryllium salt
    - 7757-79-1 potassium nitrate
  - **TSCA (Toxic Substances Control Act):**
    - 7697-37-2 nitric acid
    - 7803-55-6 ammonium trioxovanadate
    - 10377-66-9 manganese dinitrate
    - 3251-23-8 copper dinitrate
    - 1327-53-3 diarsenic trioxide
    - 7446-08-4 selenium dioxide
    - 1313-27-5 molybdenum trioxide
    - 1312-43-2 diindium trioxide
    - 10022-31-8 barium nitrate
    - 10102-45-1 thallium nitrate
    - 10099-74-8 lead dinitrate
Trade name: Tune-D25 Cross Cal Solution

554-13-2 lithium carbonate
471-34-1 calcium carbonate
7757-79-1 potassium nitrate
7631-99-4 sodium nitrate
7732-18-5 water

· Proposition 65

· Chemicals known to cause cancer:
  13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate
  1327-53-3 diarsenic trioxide
  10022-68-1 Nitric acid, cadmium salt, tetrahydrate
  10099-74-8 lead dimtrate
  543-81-7 acetic acid beryllium salt

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

· Chemicals known to cause reproductive toxicity for males:
  13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate

· Chemicals known to cause developmental toxicity:
  13478-00-7 Nitric acid, nickel(2+) salt, hexahydrate
  1327-53-3 diarsenic trioxide
  554-13-2 lithium carbonate

· Carcinogenic categories

· EPA (Environmental Protection Agency)
  10377-66-9 manganese dimtrate D
  1327-53-3 diarsenic trioxide A
  7446-08-4 selenium dioxide D
  10022-31-8 barium nitrate D, CBD(inh), NL(oral)
  10102-45-1 thallium nitrate II
  10099-74-8 lead dimtrate B2

· TLV (Threshold Limit Value established by ACGIH)
  1327-53-3 diarsenic trioxide A1
  10022-31-8 barium nitrate A4
  10099-74-8 lead dimtrate A5
  13520-83-7 uranyl nitrate, hexahydrate A1

· NIOSH-Ca (National Institute for Occupational Safety and Health)
  13520-83-7 uranyl nitrate, hexahydrate

· 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.

· Date of preparation / last revision 12/19/2018 / 1
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
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1