SAFETY DATA SHEET
CE OQ - PV Test Kit, Part Number 5063-6515

Section 1. Identification

Product identifier: CE OQ - PV Test Kit, Part Number 5063-6515
Part No. (Chemical Kit): 5063-6515

Supplier/Manufacturer: Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation): CHEMTREC®: +(61)-290372994

Relevant identified uses of the substance or mixture and uses advised against
Analytical chemistry.

- 4’-(Hydroxy) Acetophenone Test Samples: 1 x 3 ml
- Sodium Hydroxide Solution 1.0N for HPCE: 250 ml
- 20 mM Borate Buffer - pH9.3: 1 x 100 ml

Section 2. Hazard(s) identification

Classification of the substance or mixture

- 4’-(Hydroxy) Acetophenone Test Samples: FLAMMABLE LIQUIDS - Category 4
- Sodium Hydroxide Solution 1.0N for HPCE: CORROSIVE TO METALS - Category 1
- 20 mM Borate Buffer - pH9.3: SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

GHS label elements
Hazard pictograms: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1.0N for HPCE

Date of issue/Date of revision: 23/08/2017
Date of previous issue: 16/09/2013.
Version: 4
## Section 2. Hazard(s) identification

<table>
<thead>
<tr>
<th>Signal word</th>
<th>4’-(Hydroxy) Acetophenone Test Samples</th>
<th>4’-(Hydroxy) Acetophenone Test Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>WARNING H227 - Combustible liquid.</td>
<td>WARNING H227 - Combustible liquid.</td>
</tr>
<tr>
<td></td>
<td>H302 - Harmful if swallowed.</td>
<td>H302 - Harmful if swallowed.</td>
</tr>
<tr>
<td></td>
<td>H319 - Causes serious eye irritation.</td>
<td>H319 - Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
</tr>
<tr>
<td></td>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
</tr>
<tr>
<td></td>
<td>H302 - Harmful if swallowed.</td>
<td>H302 - Harmful if swallowed.</td>
</tr>
<tr>
<td></td>
<td>H319 - Causes serious eye irritation.</td>
<td>H319 - Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
</tr>
<tr>
<td></td>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
</tr>
</tbody>
</table>

### Precautionary statements

#### Prevention

<table>
<thead>
<tr>
<th>4’-(Hydroxy) Acetophenone Test Samples</th>
<th>P280 - Wear protective gloves. Wear eye or face protection.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P210 - Keep away from flames and hot surfaces. - No smoking.</td>
<td>P234 - Keep only in original container.</td>
</tr>
<tr>
<td>P270 - Do not eat, drink or smoke when using this product.</td>
<td>P271 - Use only outdoors or in a well-ventilated area.</td>
</tr>
<tr>
<td>P264 - Wash hands thoroughly after handling.</td>
<td>P261 - Avoid breathing vapour.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
<td>P264 - Wash hands thoroughly after handling.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

#### Response

<table>
<thead>
<tr>
<th>4’-(Hydroxy) Acetophenone Test Samples</th>
<th>P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
<td>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P337 + P313 - If eye irritation persists: Get medical attention.</td>
<td>P337 + P313 - If eye irritation persists: Get medical attention.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1. DANGER H290 - May be corrosive to metals.</td>
<td>P390 - Absorb spillage to prevent material damage.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
<td>P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.</td>
</tr>
<tr>
<td>P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.</td>
<td>P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.</td>
</tr>
<tr>
<td>P332 + P313 - If skin irritation occurs: Get medical attention.</td>
<td>P332 + P313 - If skin irritation occurs: Get medical attention.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3 No signal word.</td>
<td>P305 + P351 + P338 + P310 - 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 or physician.</td>
</tr>
</tbody>
</table>

---

Date of issue/Date of revision: 23/08/2017  
Date of previous issue: 16/09/2013  
Version: 4  
2/20
Section 2. Hazard(s) identification

Storage:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE
- 20 mM Borate Buffer - pH9.3

Disposal:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE
- 20 mM Borate Buffer - pH9.3

Supplemental label elements:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE
- 20 mM Borate Buffer - pH9.3

Other hazards which do not result in classification:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE
- 20 mM Borate Buffer - pH9.3

Section 3. Composition and ingredient information

Substance/mixture:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE
- 20 mM Borate Buffer - pH9.3

CAS number/other identifiers:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>(w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'-((Hydroxy) Acetophenone Test Samples acetophenone</td>
<td>100</td>
<td>98-86-2</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE Sodium hydroxide</td>
<td>≤5</td>
<td>1310-73-2</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures:

Eye contact:
- 4'-((Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

Date of issue/Date of revision: 23/08/2017  Date of previous issue: 16/09/2013  Version: 4
Section 4. First aid measures

**Inhalation**

**4’-(Hydroxy) Acetophenone Test Samples**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**20 mM Borate Buffer - pH9.3**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Chemical burns must be treated promptly by a physician.**

**Sodium Hydroxide Solution 1.0N for HPCE**

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**20 mM Borate Buffer - pH9.3**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**

**4’-(Hydroxy) Acetophenone Test Samples**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Sodium Hydroxide Solution 1.0N for HPCE**

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**20 mM Borate Buffer - pH9.3**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**

**4’-(Hydroxy) Acetophenone Test Samples**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Section 4. First aid measures

Airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Sodium Hydroxide Solution 1.0N for HPCE

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

20 mM Borate Buffer - pH9.3

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact:
- \(\text{4'-(Hydroxy) Acetophenone Test Samples}\)
  - \(\text{Sodium Hydroxide Solution 1.0N for HPCE}\):
    - Causes serious eye irritation.
  - \(\text{20 mM Borate Buffer - pH9.3}\):
    - No known significant effects or critical hazards.

Inhalation:
- \(\text{4'-(Hydroxy) Acetophenone Test Samples}\)
  - \(\text{Sodium Hydroxide Solution 1.0N for HPCE}\):
    - Causes serious eye damage.
  - \(\text{20 mM Borate Buffer - pH9.3}\):
    - No known significant effects or critical hazards.

Skin contact:
- \(\text{4'-(Hydroxy) Acetophenone Test Samples}\)
  - \(\text{Sodium Hydroxide Solution 1.0N for HPCE}\):
    - Causes skin irritation.
  - \(\text{20 mM Borate Buffer - pH9.3}\):
    - No known significant effects or critical hazards.

Ingestion:
- \(\text{4'-(Hydroxy) Acetophenone Test Samples}\)
  - \(\text{Sodium Hydroxide Solution 1.0N for HPCE}\):
    - Corrosive to the digestive tract. Causes burns.
  - \(\text{20 mM Borate Buffer - pH9.3}\):
    - No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact:
- \(\text{4'-(Hydroxy) Acetophenone Test Samples}\)
  - Adverse symptoms may include the following:
    - pain or irritation
    - watering
    - redness
  - \(\text{Sodium Hydroxide Solution 1.0N for HPCE}\):
    - Adverse symptoms may include the following:
    - pain
    - watering
    - redness
  - \(\text{20 mM Borate Buffer - pH9.3}\):
    - No specific data.
### Section 4. First aid measures

#### Inhalation
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

#### Skin contact
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

#### Ingestion
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

### Indication of immediate medical attention and special treatment needed, if necessary

#### Notes to physician
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

#### Specific treatments
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

#### Protection of first-aiders
- 4'-(Hydroxy) Acetophenone Test Samples
- Sodium Hydroxide Solution 1.0N for HPCE

- 20 mM Borate Buffer - pH9.3

See toxicological information (Section 11)
## Section 5. Firefighting measures

### Extinguishing media

| Suitable extinguishing media | 4’-(Hydroxy) Acetophenone Test Samples | Use dry chemical, CO₂, water spray (fog) or foam.  
Sodium Hydroxide Solution 1. Use an extinguishing agent suitable for the surrounding fire.  
0N for HPCE  
20 mM Borate Buffer - pH9.3 Use an extinguishing agent suitable for the surrounding fire.  
| Unsuitable extinguishing media | 4’-(Hydroxy) Acetophenone Test Samples | Do not use water jet.  
Sodium Hydroxide Solution 1. None known.  
0N for HPCE  
20 mM Borate Buffer - pH9.3 None known.  

### Specific hazards arising from the chemical

| 4’-(Hydroxy) Acetophenone Test Samples | Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.  
Sodium Hydroxide Solution 1. In a fire or if heated, a pressure increase will occur and the container may burst.  
0N for HPCE  
20 mM Borate Buffer - pH9.3 In a fire or if heated, a pressure increase will occur and the container may burst.  
| 20 mM Borate Buffer - pH9.3 | Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides  
No specific data.  

### Hazardous thermal decomposition products

| 4’-(Hydroxy) Acetophenone Test Samples | Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides  
No specific data.  
Sodium Hydroxide Solution 1. Decomposition products may include the following materials:  
| 20 mM Borate Buffer - pH9.3 |  

### Special protective actions for fire-fighters

| 4’-(Hydroxy) Acetophenone Test Samples | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  
Sodium Hydroxide Solution 1. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.  
0N for HPCE  
| 20 mM Borate Buffer - pH9.3 | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.  

### Special protective equipment for fire-fighters

| 4’-(Hydroxy) Acetophenone Test Samples | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
Sodium Hydroxide Solution 1. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
0N for HPCE  
| 20 mM Borate Buffer - pH9.3 | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  

---

Date of revision: 23/08/2017  
Date of previous issue: 16/09/2013  
Version: 4  
Page: 7/20
Section 5. Firefighting measures

Hazchem code: 4′-(Hydroxy) Acetophenone Test Samples
Not available.
Sodium Hydroxide Solution 1. 2R 0N for HPCE
20 mM Borate Buffer - pH9.3 Not available.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: 4′-(Hydroxy) Acetophenone Test Samples
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Sodium Hydroxide Solution 1. 0N for HPCE
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

20 mM Borate Buffer - pH9.3
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Put on appropriate personal protective equipment.

For emergency responders: 4′-(Hydroxy) Acetophenone Test Samples
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Sodium Hydroxide Solution 1. 0N for HPCE
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

20 mM Borate Buffer - pH9.3
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: 4′-(Hydroxy) Acetophenone Test Samples
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Sodium Hydroxide Solution 1. 0N for HPCE
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

20 mM Borate Buffer - pH9.3
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Date of issue/Date of revision: 23/08/2017
Date of previous issue: 16/09/2013
Version: 4
Section 6. Accidental release measures

Methods and material for containment and cleaning up

Methods for cleaning up: 4’-(Hydroxy) Acetophenone Test Samples
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Methods for cleaning up: Sodium Hydroxide Solution 1.0N for HPCE
Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite, or diatomaceous earth and place in container for disposal according to local regulations. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Methods for cleaning up: 20 mM Borate Buffer - pH9.3
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: 4’-(Hydroxy) Acetophenone Test Samples
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Protective measures: Sodium Hydroxide Solution 1.0N for HPCE
Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Protective measures: 20 mM Borate Buffer - pH9.3
Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

Advice on general occupational hygiene: 4’-(Hydroxy) Acetophenone Test Samples
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Advice on general occupational hygiene: Sodium Hydroxide Solution 1.0N for HPCE
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

20 mM Borate Buffer - pH9.3
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

20 mM Borate Buffer - pH9.3
Before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Sodium Hydroxide Solution 1.0N for HPCE
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from acids. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits
Section 8. Exposure controls and personal protection

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples</td>
<td>ACGIH TLV (United States, 3/2016). TWA: 10 ppm 8 hours. TWA: 49 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Acetophenone</td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>Safe Work Australia (Australia, 1/2014). TWA: 2 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td></td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**: User operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

**Appearance**

**Physical state**: 4’-(Hydroxy) Acetophenone Liquid. Test Samples
| Sodium Hydroxide Solution 1.0N for HPCE | Liquid. [Clear.] |
| Sodium Hydroxide Solution 1.0N for HPCE | Liquid. |
| 0N for HPCE | 20 mM Borate Buffer - pH9.3 | Liquid. |
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Samples</th>
<th>Sodium Hydroxide Solution 1.</th>
<th>Sodium Hydroxide Solution 1.</th>
<th>Sodium Hydroxide Solution 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>20°C (68°F)</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>202°C (395.6°F)</td>
<td>100°C (212°F)</td>
<td>100°C (212°F)</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>Closed cup: 81.85°C (179.3°F)</td>
<td>Open cup: 82°C (179.6°F)</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>0.032 (butyl acetate = 1)</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Lower and upper explosive</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>Lower: 1.1%</td>
<td>Upper: 6.7%</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td>&lt;2.4 kPa (&lt;18 mm Hg)</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>4'-Hydroxy) Acetophenone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties

**Relative density**

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>1.03</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Solubility**

<table>
<thead>
<tr>
<th>Material</th>
<th>Soluble in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>Cold water, hot water, acetone</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Very slightly soluble in diethyl ether.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td></td>
</tr>
</tbody>
</table>

**Partition coefficient: n-octanol/water**

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>1.59</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Auto-ignition temperature**

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>571°C (1059.8°F)</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Decomposition temperature**

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>Not available.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Viscosity**

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>Dynamic (room temperature): 1.68 mPa·s (1.68 cP)</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td></td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

**Reactivity**

<table>
<thead>
<tr>
<th>Material</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
</tbody>
</table>

**Chemical stability**

<table>
<thead>
<tr>
<th>Material</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>The product is stable.</td>
</tr>
</tbody>
</table>

**Possibility of hazardous reactions**

<table>
<thead>
<tr>
<th>Material</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>0N for HPCE</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 23/08/2017
Date of previous issue: 16/09/2013
Version: 4
Section 10. Stability and reactivity

### Conditions to avoid

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples</td>
<td>No specific data.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>No specific data.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>No specific data.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Incompatible materials

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples</td>
<td>Reactive or incompatible with the following materials:</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>Reactive or incompatible with the following materials:</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>May react or be incompatible with oxidising materials.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Hazardous decomposition products

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples acetophenone</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>815 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples acetophenone</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>515 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE Sodium hydroxide</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 50 Micrograms</td>
<td>-</td>
</tr>
<tr>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 Percent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes</td>
<td>1 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Sensitisation

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.
Section 11. Toxicological information

Not available.

Reproductive toxicity
Not available.

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Name</th>
<th>Routes of entry anticipated: Oral, Dermal, Inhalation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>20 mM Borate Buffer - pH9.3</td>
<td>-------------------------------------------------------</td>
</tr>
</tbody>
</table>

Potential acute health effects

Eye contact

Causes serious eye irritation.

Inhalation

May cause respiratory irritation.

Skin contact

No known significant effects or critical hazards.

Ingestion

Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:

- pain or irritation
- watering
- redness

Ingestion

Corrosive to the digestive tract. Causes burns.

Date of issue/Date of revision: 23/08/2017
Date of previous issue: 16/09/2013
Version: 4
Section 11. Toxicological information

Inhalation: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

20 mM Borate Buffer - pH9.3

Skin contact: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

20 mM Borate Buffer - pH9.3

Ingestion: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. Adverse symptoms may include the following:
- stomach pains

20 mM Borate Buffer - pH9.3

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure
Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Potential chronic health effects: Not available.

General: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. No known significant effects or critical hazards.
0N for HPCE
20 mM Borate Buffer - pH9.3

Carcinogenicity: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. No known significant effects or critical hazards.
0N for HPCE
20 mM Borate Buffer - pH9.3

Mutagenicity: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. No known significant effects or critical hazards.
0N for HPCE
20 mM Borate Buffer - pH9.3

Teratogenicity: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. No known significant effects or critical hazards.
0N for HPCE
20 mM Borate Buffer - pH9.3

Developmental effects: 4’-(Hydroxy) Acetophenone Test Samples
Sodium Hydroxide Solution 1. No known significant effects or critical hazards.
0N for HPCE
20 mM Borate Buffer - pH9.3
Section 11. Toxicological information

**Fertility effects**
- 4’-(Hydroxy) Acetophenone Test Samples
  - No known significant effects or critical hazards.
- Sodium Hydroxide Solution 1.0N for HPCE
  - No known significant effects or critical hazards.
- 20 mM Borate Buffer - pH9.3
  - No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
- Not available.

Section 12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples acetophenone</td>
<td>Acute LC50 155000 μg/l Fresh water</td>
<td>Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE Sodium hydroxide</td>
<td>Acute LC50 125 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE Sodium hydroxide</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’-(Hydroxy) Acetophenone Test Samples acetophenone</td>
<td>1.59</td>
<td>0.4749</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

- Soil/water partition coefficient (K<sub>oc</sub>): Not available.

**Other adverse effects**: No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**
- The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or
Section 13. Disposal considerations

Landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN3316</td>
<td>UN3316</td>
<td>UN3316</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>CHEMICAL KIT</td>
<td>CHEMICAL KIT</td>
<td>Chemical kit</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Additional information

**ADG**
- Hazchem code: 2Z
- Special provisions: 251, 340

**IMDG**
- Emergency schedules: F-A, _S-P_
- Special provisions: 251, 340

**IATA**
- Special provisions: A44, A163

Special precautions for user:
- Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code: Not available.

Section 15. Regulatory information

**Standard Uniform Schedule of Medicine and Poisons**
- 5

**Model Work Health and Safety Regulations - Scheduled Substances**
- No listed substance

**International regulations**
- Chemical Weapon Convention List Schedules I, II & III Chemicals
  - Not listed.
- Montreal Protocol (Annexes A, B, C, E)
  - Not listed.
- Stockholm Convention on Persistent Organic Pollutants
  - Not listed.
Section 15. Regulatory information

**Rotterdam Convention on Prior Informed Consent (PIC)**
Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**
Not listed.

**Inventory list**
- **Australia**: Not determined.
- **Canada**: Not determined.
- **China**: Not determined.
- **Europe**: Not determined.
- **Japan**: [Japan inventory (ENCS)]: Not determined. [Japan inventory (ISHL)]: Not determined.
- **Malaysia**: Not determined.
- **New Zealand**: Not determined.
- **Philippines**: Not determined.
- **Republic of Korea**: Not determined.
- **Taiwan**: Not determined.
- **Thailand**: Not determined.
- **Turkey**: Not determined.
- **United States**: Not determined.
- **Viet Nam**: Not determined.

Section 16. Any other relevant information

**History**
- **Date of issue/Date of revision**: 23/08/2017
- **Date of previous issue**: 16/09/2013
- **Version**: 4

**Key to abbreviations**
- ADG = Australian Dangerous Goods
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- NOHSC = National Occupational Health and Safety Commission
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

**Procedure used to derive the classification**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 4, H227</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>Eye Irrit. 2A, H319</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>Sodium Hydroxide Solution 1.0N for HPCE</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td>Expert judgment</td>
</tr>
</tbody>
</table>

**References**: Not available.
Notice to reader

Disclaimer: 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.