

# SAFETY DATA SHEET

Electrospray Kit, Part Number G1946-60600

## Section 1. Identification

**Product identifier** : Electrospray Kit, Part Number G1946-60600  
**Part No. (Chemical Kit)** : G1946-60600  
**Part No.** : ES/APCI Positive Ion Performance Standard G1946-85004  
 Electro spray Calibrant Solution G2421-60001

### Relevant identified uses of the substance or mixture and uses advised against

Analytical chemistry.

ES/APCI Positive Ion Performance Standard 5 x 1 ml ampoule  
 Electro spray Calibrant Solution 100 ml

**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

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

ES/APCI Positive Ion Performance Standard  
 H225 FLAMMABLE LIQUIDS - Category 2  
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  
 H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

### Electrospray Calibrant Solution

H225 FLAMMABLE LIQUIDS - Category 2  
 H302 ACUTE TOXICITY (oral) - Category 4  
 H312 ACUTE TOXICITY (dermal) - Category 4  
 H332 ACUTE TOXICITY (inhalation) - Category 4  
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

### GHS label elements

#### Hazard pictograms

ES/APCI Positive Ion Performance Standard



Electrospray Calibrant Solution



#### Signal word

ES/APCI Positive Ion Performance Standard DANGER  
 Electro spray Calibrant Solution DANGER

## Section 2. Hazard(s) identification

<p><b>Hazard statements</b></p>	<p>: ES/APCI Positive Ion Performance Standard</p> <p>Electrospray Calibrant Solution</p>	<p>H225 - Highly flammable liquid and vapour.</p> <p>H319 - Causes serious eye irritation.</p> <p>H336 - May cause drowsiness or dizziness.</p> <p>H225 - Highly flammable liquid and vapour.</p>
<p><b>Precautionary statements</b></p>		
<p><b>Prevention</b></p>	<p>: ES/APCI Positive Ion Performance Standard</p> <p>Electrospray Calibrant Solution</p>	<p>P280 - Wear protective gloves. Wear eye or face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P233 - Keep container tightly closed.</p> <p>P271 - Use only outdoors or in a well-ventilated area.</p> <p>P261 - Avoid breathing vapour.</p> <p>P264 - Wash hands thoroughly after handling.</p> <p>P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.</p> <p>P242 - Use only non-sparking tools.</p> <p>P243 - Take precautionary measures against static discharge.</p> <p>P233 - Keep container tightly closed.</p> <p>P271 - Use only outdoors or in a well-ventilated area.</p> <p>P261 - Avoid breathing vapour.</p> <p>P270 - Do not eat, drink or smoke when using this product.</p> <p>P264 - Wash hands thoroughly after handling.</p>
<p><b>Response</b></p>	<p>: ES/APCI Positive Ion Performance Standard</p> <p>Electrospray Calibrant Solution</p>	<p>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.</p> <p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical attention.</p> <p>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.</p> <p>P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</p> <p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or</p>

## Section 2. Hazard(s) identification

		physician if you feel unwell. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
<b>Storage</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	P405 - Store locked up.
	Electrospray Calibrant Solution	P403 - Store in a well-ventilated place. P235 - Keep cool. P403 - Store in a well-ventilated place.
<b>Disposal</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Electrospray Calibrant Solution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	Not applicable.
	Electrospray Calibrant Solution	Not applicable.
<b>Other hazards which do not result in classification</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	None known.
	Electrospray Calibrant Solution	None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	Mixture
	Electrospray Calibrant Solution	Mixture

### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
<b>ES/APCI Positive Ion Performance Standard</b> Propan-2-ol	≥30 - ≤60	67-63-0
<b>Electrospray Calibrant Solution</b> Acetonitrile	≥90	75-05-8

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

<b>Eye contact</b>	: <b>ES/APCI Positive Ion Performance Standard</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
	Electrospray Calibrant Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

## Section 4. First aid measures

### Inhalation

: ES/APCI Positive Ion  
Performance Standard

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. Get medical attention. If necessary, call a poison center or physician. 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.

Electrospray Calibrant  
Solution

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. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### Skin contact

: ES/APCI Positive Ion  
Performance Standard

Electrospray Calibrant  
Solution

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. Wash with plenty of soap and 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. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

### Ingestion

: ES/APCI Positive Ion  
Performance Standard

Electrospray Calibrant  
Solution

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

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

## Section 4. First aid measures

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

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Causes serious eye irritation.  Causes serious eye irritation.
<b>Inhalation</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Harmful if inhaled.
<b>Skin contact</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	No known significant effects or critical hazards.  Harmful in contact with skin.
<b>Ingestion</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Can cause central nervous system (CNS) depression.  Harmful if swallowed.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: ES/APCI Positive Ion Performance Standard  Electrospray Calibrant Solution	Adverse symptoms may include the following:  pain or irritation watering redness Adverse symptoms may include the following:  pain or irritation watering redness
<b>Inhalation</b>	: ES/APCI Positive Ion Performance Standard  Electrospray Calibrant Solution	Adverse symptoms may include the following:  nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness No specific data.
<b>Skin contact</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	No specific data.  No specific data.
<b>Ingestion</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	No specific data.  No specific data.

## Section 4. First aid measures

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

<b>Notes to physician</b>	: ES/APCI Positive Ion Performance Standard  Electrospray Calibrant Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: ES/APCI Positive Ion Performance Standard Electrospray Calibrant Solution	No specific treatment.  No specific treatment.
<b>Protection of first-aiders</b>	: ES/APCI Positive Ion Performance Standard   Electrospray Calibrant Solution	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: ES/APCI Positive Ion Performance Standard Electrospray Calibrant Solution	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.  Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: ES/APCI Positive Ion Performance Standard Electrospray Calibrant Solution	Do not use water jet.  Do not use water jet.
<b>Specific hazards arising from the chemical</b>	: ES/APCI Positive Ion Performance Standard  Electrospray Calibrant Solution	Highly flammable liquid and vapour. 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.  Highly flammable liquid and vapour. 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.
<b>Hazardous thermal decomposition products</b>	: ES/APCI Positive Ion Performance Standard  Electrospray Calibrant Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

## Section 5. Firefighting measures

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<b>Special protective actions for fire-fighters</b>	: ES/APCI Positive Ion Performance Standard	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.
	Electrospray Calibrant Solution	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.
<b>Special protective equipment for fire-fighters</b>	: ES/APCI Positive Ion Performance Standard	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Electrospray Calibrant Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Hazchem code</b>	: ES/APCI Positive Ion Performance Standard	•2YE
	Electrospray Calibrant Solution	•2YE

## Section 6. Accidental release measures


### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: ES/APCI Positive Ion Performance Standard	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 spilt material. Shut off all ignition sources. No flares, 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.
	Electrospray Calibrant Solution	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 spilt material. Shut off all ignition sources. No flares, 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.
<b>For emergency responders</b>	: ES/APCI Positive Ion Performance Standard	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".
	Electrospray Calibrant Solution	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".

## Section 6. Accidental release measures


<b>Environmental precautions</b>	:  ES/APCI Positive Ion Performance Standard	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).
	Electrospray Calibrant Solution	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).

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	:  ES/APCI Positive Ion Performance Standard	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.
	Electrospray Calibrant Solution	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.

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	:  ES/APCI Positive Ion Performance Standard	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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Electrospray Calibrant Solution	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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.



## Section 7. Handling and storage

### Advice on general occupational hygiene

: ES/APCI Positive Ion Performance Standard

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.

Electrospray Calibrant Solution

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.

### Conditions for safe storage, including any incompatibilities

: ES/APCI Positive Ion Performance Standard

Store in accordance with local regulations. Store in a segregated and approved area. 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 locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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. Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Electrospray Calibrant Solution

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
ES/APCI Positive Ion Performance Standard Propan-2-ol	<b>Safe Work Australia (Australia, 1/2014).</b> STEL: 1230 mg/m <sup>3</sup> 15 minutes. STEL: 500 ppm 15 minutes. TWA: 983 mg/m <sup>3</sup> 8 hours. TWA: 400 ppm 8 hours.
Electrospray Calibrant Solution Acetonitrile	<b>Safe Work Australia (Australia, 1/2014).</b> <b>Absorbed through skin.</b> STEL: 101 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 67 mg/m <sup>3</sup> 8 hours. TWA: 40 ppm 8 hours.

## Section 8. Exposure controls and personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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.
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- 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** : ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution Liquid.
- Colour** : ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution Colourless.
- Odour** : ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution Not available.

## Section 9. Physical and chemical properties

<b>Odour threshold</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>pH</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Melting point</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Boiling point</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. 81.7°C (179.1°F)
<b>Flash point</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Closed cup: -18 to 23°C (-0.4 to 73.4°F) Closed cup: -18 to 23°C (-0.4 to 73.4°F)
<b>Evaporation rate</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Flammability (solid, gas)</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not applicable. Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Vapour pressure</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Vapour density</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Relative density</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Solubility</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Auto-ignition temperature</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.
<b>Decomposition temperature</b>	: ES/APCI Positive Ion Performance Standard Electropray Calibrant Solution	Not available. Not available.

## Section 9. Physical and chemical properties

<b>Viscosity</b>	: ES/APCI Positive Ion Performance Standard	Not available.
	Electrospray Calibrant Solution	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: ES/APCI Positive Ion Performance Standard	No specific test data related to reactivity available for this product or its ingredients.
	Electrospray Calibrant Solution	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: ES/APCI Positive Ion Performance Standard	The product is stable.
	Electrospray Calibrant Solution	The product is stable.
<b>Possibility of hazardous reactions</b>	: ES/APCI Positive Ion Performance Standard	Under normal conditions of storage and use, hazardous reactions will not occur.
	Electrospray Calibrant Solution	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: ES/APCI Positive Ion Performance Standard	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
	Electrospray Calibrant Solution	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>Incompatible materials</b>	: ES/APCI Positive Ion Performance Standard	Reactive or incompatible with the following materials:  oxidizing materials
	Electrospray Calibrant Solution	Reactive or incompatible with the following materials:  oxidizing materials
<b>Hazardous decomposition products</b>	: ES/APCI Positive Ion Performance Standard	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Electrospray Calibrant Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ES/APCI Positive Ion Performance Standard Propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Electrospray Calibrant Solution Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
ES/APCI Positive Ion Performance Standard Propan-2-ol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Electrospray Calibrant Solution Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

### Sensitisation

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ES/APCI Positive Ion Performance Standard Propan-2-ol	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : ES/APCI Positive Ion Performance Standard  
Electrospray Calibrant Solution

Routes of entry anticipated: Oral, Dermal, Inhalation.

Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : ES/APCI Positive Ion Performance Standard  
Electrospray Calibrant Solution

Causes serious eye irritation.

Causes serious eye irritation.

**Inhalation** : ES/APCI Positive Ion Performance Standard  
Electrospray Calibrant Solution

Can cause central nervous system (CNS) depression.  
May cause drowsiness or dizziness.  
Harmful if inhaled.

**Skin contact** : ES/APCI Positive Ion Performance Standard  
Electrospray Calibrant Solution

No known significant effects or critical hazards.

Harmful in contact with skin.

## Section 11. Toxicological information

**Ingestion** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution Can cause central nervous system (CNS) depression.  
Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : ES/APCI Positive Ion Performance Standard Adverse symptoms may include the following:  
pain or irritation  
watering  
redness  
Electrospray Calibrant Solution Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : ES/APCI Positive Ion Performance Standard Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
Electrospray Calibrant Solution No specific data.

**Skin contact** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution No specific data.

**Ingestion** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution No specific data.

### 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** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution No known significant effects or critical hazards.

**Carcinogenicity** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution No known significant effects or critical hazards.

**Mutagenicity** : ES/APCI Positive Ion Performance Standard Electro spray Calibrant Solution No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Teratogenicity</b>	: ES/APCI Positive Ion Performance Standard	No known significant effects or critical hazards.
	Electrospray Calibrant Solution	No known significant effects or critical hazards.
<b>Developmental effects</b>	: ES/APCI Positive Ion Performance Standard	No known significant effects or critical hazards.
	Electrospray Calibrant Solution	No known significant effects or critical hazards.
<b>Fertility effects</b>	: ES/APCI Positive Ion Performance Standard	No known significant effects or critical hazards.
	Electrospray Calibrant Solution	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
ES/Calibrant Solution	
Oral	526.3 mg/kg
Dermal	1157.9 mg/kg
Inhalation (vapours)	11.58 mg/l

<b>Other information</b>	: ES/APCI Positive Ion Performance Standard	Adverse symptoms may include the following: Repeated exposure may cause skin dryness or cracking.
	Electrospray Calibrant Solution	Adverse symptoms may include the following: Repeated exposure may cause skin dryness or cracking.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
ES/APCI Positive Ion Performance Standard Propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400000 to 1950000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
Electrospray Calibrant Solution Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ES/Calibrant Solution Acetonitrile	-	-	Readily

### Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<input checked="" type="checkbox"/> ES/APCI Positive Ion Performance Standard Propan-2-ol	0.05	-	low
<b>Electrospray Calibrant Solution</b> Acetonitrile	-0.34	3	low

### 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 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	ADG	IMDG	IATA
UN number	UN3316	UN3316	UN3316
UN proper shipping name	CHEMICAL KIT	<input checked="" type="checkbox"/> CHEMICAL KIT	<input checked="" type="checkbox"/> chemical kit
Transport hazard class(es)	9 	9 	9 
Packing group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	II
Environmental hazards	<input checked="" type="checkbox"/> No.	No.	No.

### Additional information

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

**IMDG** :  **Emergency schedules** F-A, \_S-P\_  
**Special provisions** 251, 340



## Section 14. Transport information

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.  
**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

Not regulated.

### 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.

#### 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** : 06/09/2017  
**Date of previous issue** : 18/09/2014.  
**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  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 NOHSC = National Occupational Health and Safety Commission  
 SUSMP = Standard Uniform Schedule of Medicine and Poisons  
 UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<b>ES/APCI Positive Ion Performance Standard</b> Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method
<b>Electrospray Calibrant Solution</b> Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2A, H319	Expert judgment Calculation method Calculation method Calculation method Calculation method

**References** : Not available.

📌 Indicates information that has changed from previously issued version.

### Notice to reader

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