

# SAFETY DATA SHEET

Operator Training Samples for FID Instruments, Part Number 18801-60700

## Section 1. Identification

**Product identifier** : Operator Training Samples for FID Instruments, Part Number 18801-60700  
**Part no. (chemical kit)** : 18801-60700  
**Part no.** :  Flame Ionization Detector Sample A 18801-60700A  
 Flame Ionization Detector Sample B 18801-60700B

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

**Material uses** :  Reagents and Standards for Analytical Chemistry Laboratory Use  
 Flame Ionization Detector Sample A 1 x 0.5 ml  
 Flame Ionization Detector Sample B 1 x 0.5 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

#### Flame Ionization Detector

##### Sample A

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


#### Flame Ionization Detector


##### Sample B

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

### GHS label elements

#### Hazard pictograms

Flame Ionization Detector Sample A 

Flame Ionization Detector Sample B 

**Signal word** :  Flame Ionization Detector Sample A DANGER  
 Flame Ionization Detector Sample B DANGER

## Section 2. Hazard(s) identification

<b>Hazard statements</b>	: Flame Ionization Detector Sample A	H225 - Highly flammable liquid and vapour.  H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
	Flame Ionization Detector Sample B	H225 - Highly flammable liquid and vapour.  H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: Flame Ionization Detector Sample A	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing vapour. P264 - Wash hands thoroughly after handling.
	Flame Ionization Detector Sample B	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing vapour. P264 - Wash hands thoroughly after handling.
<b>Response</b>	: Flame Ionization Detector Sample A	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. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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.
	Flame Ionization Detector Sample B	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. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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.

## Section 2. Hazard(s) identification

<b>Storage</b>	: Flame Ionization Detector Sample A	P405 - Store locked up.  P403 - Store in a well-ventilated place. P235 - Keep cool.
	Flame Ionization Detector Sample B	P405 - Store locked up.  P403 - Store in a well-ventilated place. P235 - Keep cool.
<b>Disposal</b>	: Flame Ionization Detector Sample A	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Flame Ionization Detector Sample B	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>		
<b>Additional warning phrases</b>	: Flame Ionization Detector Sample A	Not applicable.
	Flame Ionization Detector Sample B	Not applicable.
<b>Other hazards which do not result in classification</b>	: Flame Ionization Detector Sample A	None known.
	Flame Ionization Detector Sample B	None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: Flame Ionization Detector Sample A	Mixture
	Flame Ionization Detector Sample B	Mixture

### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
<b>Flame Ionization Detector Sample A</b> Acetone	≥90	67-64-1
<b>Flame Ionization Detector Sample B</b> Acetone	≥90	67-64-1

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>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample 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.

## Section 4. First aid measures

<b>Inhalation</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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.
<b>Skin contact</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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.
<b>Ingestion</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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

## Section 4. First aid measures

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>	: Flame Ionization Detector Sample A	Causes serious eye irritation.
	Flame Ionization Detector Sample B	Causes serious eye irritation.
<b>Inhalation</b>	: Flame Ionization Detector Sample A	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
	Flame Ionization Detector Sample B	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
<b>Skin contact</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Ingestion</b>	: Flame Ionization Detector Sample A	Can cause central nervous system (CNS) depression.
	Flame Ionization Detector Sample B	Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Flame Ionization Detector Sample A	Adverse symptoms may include the following: pain or irritation watering redness
	Flame Ionization Detector Sample B	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: Flame Ionization Detector Sample A	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Flame Ionization Detector Sample B	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: Flame Ionization Detector Sample A	No specific data.
	Flame Ionization Detector Sample B	No specific data.
<b>Ingestion</b>	: Flame Ionization Detector Sample A	No specific data.
	Flame Ionization Detector Sample B	No specific data.

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

## Section 4. First aid measures

<b>Notes to physician</b>	: Flame Ionization Detector Sample A	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Flame Ionization Detector Sample B	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Flame Ionization Detector Sample A	No specific treatment.
	Flame Ionization Detector Sample B	No specific treatment.
<b>Protection of first-aiders</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: Flame Ionization Detector Sample A	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Flame Ionization Detector Sample B	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: Flame Ionization Detector Sample A	Do not use water jet.
	Flame Ionization Detector Sample B	Do not use water jet.
<b>Specific hazards arising from the chemical</b>	: Flame Ionization Detector Sample A	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. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
	Flame Ionization Detector Sample B	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. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
<b>Hazardous thermal decomposition products</b>	: Flame Ionization Detector Sample A	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Flame Ionization Detector Sample B	Decomposition products may include the following materials: carbon dioxide carbon monoxide

## Section 5. Firefighting measures

<b>Special protective actions for fire-fighters</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	•3YE
	Flame Ionization Detector Sample B	•3YE

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	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".
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	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).
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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>	: Flame Ionization Detector Sample A	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.
	Flame Ionization Detector Sample B	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

: Flame Ionization Detector Sample A

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.

Flame Ionization Detector Sample B

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

: Flame Ionization Detector Sample A

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.

Flame Ionization Detector Sample B

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.

## Section 8. Exposure controls and personal protection

### [Control parameters](#)

### [Occupational exposure limits](#)

Ingredient name	Exposure limits
<b>Flame Ionization Detector Sample A</b> Acetone	<b>Safe Work Australia (Australia, 1/2014).</b> STEL: 2375 mg/m <sup>3</sup> 15 minutes. STEL: 1000 ppm 15 minutes. TWA: 1185 mg/m <sup>3</sup> 8 hours. TWA: 500 ppm 8 hours.
<b>Flame Ionization Detector Sample B</b> Acetone	<b>Safe Work Australia (Australia, 1/2014).</b> STEL: 2375 mg/m <sup>3</sup> 15 minutes. STEL: 1000 ppm 15 minutes. TWA: 1185 mg/m <sup>3</sup> 8 hours. TWA: 500 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** : Flame Ionization Detector Sample A Liquid.  
Flame Ionization Detector Sample B Liquid.
- Colour** : Flame Ionization Detector Sample A Not available.  
Flame Ionization Detector Sample B Not available.
- Odour** : Flame Ionization Detector Sample A Not available.  
Flame Ionization Detector Sample B Not available.

## Section 9. Physical and chemical properties

<b>Odour threshold</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.
<b>pH</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.
<b>Melting point</b>	: Flame Ionization Detector Sample A	-95°C (-139°F)
	: Flame Ionization Detector Sample B	-95°C (-139°F)
<b>Boiling point</b>	: Flame Ionization Detector Sample A	56°C (132.8°F)
	: Flame Ionization Detector Sample B	56°C (132.8°F)
<b>Flash point</b>	: Flame Ionization Detector Sample A	Closed cup: -18°C (-0.4°F)
	: Flame Ionization Detector Sample B	Closed cup: -18°C (-0.4°F)
<b>Evaporation rate</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.
<b>Flammability (solid, gas)</b>	: Flame Ionization Detector Sample A	Not applicable.
	: Flame Ionization Detector Sample B	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: Flame Ionization Detector Sample A	Lower: 2.2% Upper: 13%
	: Flame Ionization Detector Sample B	Lower: 2.2% Upper: 13%
<b>Vapour pressure</b>	: Flame Ionization Detector Sample A	24 kPa (180 mm Hg) [room temperature]
	: Flame Ionization Detector Sample B	24 kPa (180 mm Hg) [room temperature]
<b>Vapour density</b>	: Flame Ionization Detector Sample A	2 [Air = 1]
	: Flame Ionization Detector Sample B	2 [Air = 1]
<b>Relative density</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.
<b>Solubility</b>	: Flame Ionization Detector Sample A	Easily soluble in the following materials: cold water and hot water.
	: Flame Ionization Detector Sample B	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n- octanol/water</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.
<b>Auto-ignition temperature</b>	: Flame Ionization Detector Sample A	Not available.
	: Flame Ionization Detector Sample B	Not available.

## Section 9. Physical and chemical properties

<b>Decomposition temperature</b>	: Flame Ionization Detector Sample A	Not available.
	Flame Ionization Detector Sample B	Not available.
<b>Viscosity</b>	: Flame Ionization Detector Sample A	Not available.
	Flame Ionization Detector Sample B	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: Flame Ionization Detector Sample A	No specific test data related to reactivity available for this product or its ingredients.
	Flame Ionization Detector Sample B	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: Flame Ionization Detector Sample A	The product is stable.
	Flame Ionization Detector Sample B	The product is stable.
<b>Possibility of hazardous reactions</b>	: Flame Ionization Detector Sample A	Under normal conditions of storage and use, hazardous reactions will not occur.
	Flame Ionization Detector Sample B	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Flame Ionization Detector Sample A	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. Do not allow vapour to accumulate in low or confined areas.
	Flame Ionization Detector Sample B	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. Do not allow vapour to accumulate in low or confined areas.
<b>Incompatible materials</b>	: Flame Ionization Detector Sample A	Reactive or incompatible with the following materials:  oxidizing materials
	Flame Ionization Detector Sample B	Reactive or incompatible with the following materials:  oxidizing materials
<b>Hazardous decomposition products</b>	: Flame Ionization Detector Sample A	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Flame Ionization Detector Sample B	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

**Section 11. Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
<b>Flame Ionization Detector Sample A</b> Acetone	LC50 Inhalation Vapour LD50 Oral	Rat Rat	76 mg/l 5800 mg/kg	4 hours -
<b>Flame Ionization Detector Sample B</b> Acetone	LC50 Inhalation Vapour LD50 Oral	Rat Rat	76 mg/l 5800 mg/kg	4 hours -

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Flame Ionization Detector Sample A</b> Acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
<b>Flame Ionization Detector Sample B</b> Acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-

**Sensitisation**

Not available.

**Mutagenicity****Conclusion/Summary** : Not available.**Carcinogenicity****Conclusion/Summary** : Not available.**Reproductive toxicity****Conclusion/Summary** : Not available.**Teratogenicity****Conclusion/Summary** : Not available.**Specific target organ toxicity (single exposure)**

Name	Category	Route of exposure	Target organs
<b>Flame Ionization Detector Sample A</b> Acetone	Category 3	Not applicable.	Narcotic effects
<b>Flame Ionization Detector Sample B</b> Acetone	Category 3	Not applicable.	Narcotic effects

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

## Section 11. Toxicological information

<b>Information on likely routes of exposure</b>	: Flame Ionization Detector Sample A	Routes of entry anticipated: Oral, Dermal, Inhalation.
	: Flame Ionization Detector Sample B	Routes of entry anticipated: Oral, Dermal, Inhalation.
<b><u>Potential acute health effects</u></b>		
<b>Eye contact</b>	: Flame Ionization Detector Sample A	Causes serious eye irritation.
	: Flame Ionization Detector Sample B	Causes serious eye irritation.
<b>Inhalation</b>	: Flame Ionization Detector Sample A	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
	: Flame Ionization Detector Sample B	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
<b>Skin contact</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Ingestion</b>	: Flame Ionization Detector Sample A	Can cause central nervous system (CNS) depression.
	: Flame Ionization Detector Sample B	Can cause central nervous system (CNS) depression.

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

<b>Eye contact</b>	: Flame Ionization Detector Sample A	Adverse symptoms may include the following: pain or irritation watering redness
	: Flame Ionization Detector Sample B	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: Flame Ionization Detector Sample A	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	: Flame Ionization Detector Sample B	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: Flame Ionization Detector Sample A	No specific data.
	: Flame Ionization Detector Sample B	No specific data.
<b>Ingestion</b>	: Flame Ionization Detector Sample A	No specific data.
	: Flame Ionization Detector Sample B	No specific data.

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

#### Short term exposure

## Section 11. Toxicological information

**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

<b>General</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Developmental effects</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.
<b>Fertility effects</b>	: Flame Ionization Detector Sample A	No known significant effects or critical hazards.
	: Flame Ionization Detector Sample B	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

<b>Other information</b>	: Flame Ionization Detector Sample A	Adverse symptoms may include the following: altered blood counts. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	: Flame Ionization Detector Sample B	Adverse symptoms may include the following: altered blood counts. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

## Section 12. Ecological information

### Toxicity

## Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
<b>Flame Ionization Detector Sample A</b> Acetone	Acute EC50 20.565 mg/l Marine water Acute LC50 6000000 µg/l Fresh water Acute LC50 10000 µg/l Fresh water Acute LC50 5600 ppm Fresh water Chronic NOEC 4.95 mg/l Marine water Chronic NOEC 0.016 ml/L Fresh water Chronic NOEC 0.1 ml/L Fresh water	Algae - Ulva pertusa Crustaceans - Gammarus pulex Daphnia - Daphnia magna Fish - Poecilia reticulata Algae - Ulva pertusa Crustaceans - Daphniidae Daphnia - Daphnia magna - Neonate Fish - Fundulus heteroclitus	96 hours 48 hours 48 hours 96 hours 96 hours 21 days 21 days 4 weeks
<b>Flame Ionization Detector Sample B</b> Acetone	Acute EC50 20.565 mg/l Marine water Acute LC50 6000000 µg/l Fresh water Acute LC50 10000 µg/l Fresh water Acute LC50 5600 ppm Fresh water Chronic NOEC 4.95 mg/l Marine water Chronic NOEC 0.016 ml/L Fresh water Chronic NOEC 0.1 ml/L Fresh water Chronic NOEC 0.1 mg/l Fresh water	Algae - Ulva pertusa Crustaceans - Gammarus pulex Daphnia - Daphnia magna Fish - Poecilia reticulata Algae - Ulva pertusa Crustaceans - Daphniidae Daphnia - Daphnia magna - Neonate Fish - Fundulus heteroclitus	96 hours 48 hours 48 hours 96 hours 96 hours 21 days 21 days 4 weeks

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Flame Ionization Detector Sample A</b> Acetone	OECD 301B Ready Biodegradability - CO2 Evolution Test	95 % - Readily - 28 days	-	-
<b>Flame Ionization Detector Sample B</b> Acetone	OECD 301B Ready Biodegradability - CO2 Evolution Test	95 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Flame Ionization Detector Sample A</b> Acetone	-	-	Readily
<b>Flame Ionization Detector Sample B</b> Acetone	-	-	Readily

### Bioaccumulative potential



## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Flame Ionization Detector Sample A Acetone	-0.23	3	low
Flame Ionization Detector Sample B Acetone	-0.23	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** : Not regulated as Dangerous Goods according to the ADG Code .

### Additional information

**Remarks:** De minimis quantities

**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)

## Section 15. Regulatory information

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](#)

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: Not determined.

## Section 16. Any other relevant information

### [History](#)

**Date of issue/Date of revision** : 09/05/2018

**Date of previous issue** : 28/04/2016

**Version** : 6

### [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](#)

**Section 16. Any other relevant information**

Classification	Justification
<b>Flame Ionization Detector Sample A</b> Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method
<b>Flame Ionization Detector Sample B</b> Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

**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.