

# SAFETY DATA SHEET

API-TOF Reference Mix, Part Number G1969-85001

## Section 1. Identification

### 1.1 Product identifier

**Product name** : API-TOF Reference Mix, Part Number G1969-85001  
**Part no. (chemical kit)** : G1969-85001  
**Part no.** : Ampoule 1 Not available.  
 Ampoule 2 Not available.  
 Ampoule 3 Not available.  
**Validation date** : 5/23/2018

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

**Material uses** :  Reagents and Standards for Analytical Chemistry Laboratory Use  
 Ampoule 1 2.2 ml  
 Ampoule 2 2.2 ml  
 Ampoule 3 2.2 ml

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
 5301 Stevens Creek Blvd  
 Santa Clara, CA 95051, USA  
 800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

**OSHA/HCS status** :  Ampoule 1 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 Ampoule 2 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 Ampoule 3 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification of the substance or mixture

#### Ampoule 1

H225 FLAMMABLE LIQUIDS - Category 2  
 H302 ACUTE TOXICITY (oral) - Category 4  
 H312 ACUTE TOXICITY (dermal) - Category 4  
 H332 ACUTE TOXICITY (inhalation) - Category 4  
 H319 EYE IRRITATION - Category 2A  
 H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

#### Ampoule 2

H225 FLAMMABLE LIQUIDS - Category 2  
 H302 ACUTE TOXICITY (oral) - Category 4  
 H312 ACUTE TOXICITY (dermal) - Category 4  
 H332 ACUTE TOXICITY (inhalation) - Category 4  
 H319 EYE IRRITATION - Category 2A  
 H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

## Section 2. Hazards identification

### Ampoule 3

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H312	ACUTE TOXICITY (dermal) - Category 4
H332	ACUTE TOXICITY (inhalation) - Category 4
H319	EYE IRRITATION - Category 2A
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

### 2.2 GHS label elements

#### Hazard pictograms

: Ampoule 1



Ampoule 2



Ampoule 3



#### Signal word

: Ampoule 1

Danger

Ampoule 2

Danger

Ampoule 3

Danger

#### Hazard statements

: Ampoule 1

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys, liver)

Ampoule 2

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys, liver)

Ampoule 3

H225 - Highly flammable liquid and vapor.  
 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.  
 H319 - Causes serious eye irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys, liver)

#### Precautionary statements

## Section 2. Hazards identification

### Prevention

: Ampoule 1

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 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.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 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.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 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.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P314 - Get medical attention if you feel unwell.  
 P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
 P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

Ampoule 2

Ampoule 3

### Response

: Ampoule 1

## Section 2. Hazards identification

Ampoule 2

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P302 + P352 + P312 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

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.

P314 - Get medical attention if you feel unwell.

P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P302 + P352 + P312 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

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.

Ampoule 3

P314 - Get medical attention if you feel unwell.

P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P302 + P352 + P312 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse.

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. Hazards identification

<b>Storage</b>	: Ampoule 1	P403 - Store in a well-ventilated place. P235 - Keep cool.
	Ampoule 2	P403 - Store in a well-ventilated place. P235 - Keep cool.
	Ampoule 3	P403 - Store in a well-ventilated place. P235 - Keep cool.
<b>Disposal</b>	: Ampoule 1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Ampoule 2	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Ampoule 3	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: Ampoule 1	None known.
	Ampoule 2	None known.
	Ampoule 3	None known.
<b>2.3 Other hazards</b>		
<b>Hazards not otherwise classified</b>	: Ampoule 1	None known.
	Ampoule 2	None known.
	Ampoule 3	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Ampoule 1	Mixture
	Ampoule 2	Mixture
	Ampoule 3	Mixture

Ingredient name	%	CAS number
<b>Ampoule 1</b> Acetonitrile	≥90	75-05-8
<b>Ampoule 2</b> Acetonitrile	≥90	75-05-8
<b>Ampoule 3</b> Acetonitrile	≥90	75-05-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**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

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: Ampoule 1	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.
	Ampoule 2	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

## Section 4. First aid measures

	Ampoule 3	<p>medical attention.</p> <p>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.</p>
<b>Inhalation</b>	: Ampoule 1	<p>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 following exposure or if feeling unwell. 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.</p>
	Ampoule 2	<p>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 following exposure or if feeling unwell. 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.</p>
	Ampoule 3	<p>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 following exposure or if feeling unwell. 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</p>

## Section 4. First aid measures

### Skin contact

: Ampoule 1

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.

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 following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ampoule 2

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 following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ampoule 3

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 following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

### Ingestion

: Ampoule 1

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.

Ampoule 2

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

## Section 4. First aid measures

Ampoule 3

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 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.

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

#### Potential acute health effects

<b>Eye contact</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation.
<b>Inhalation</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Harmful if inhaled. Harmful if inhaled. Harmful if inhaled.
<b>Skin contact</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Harmful in contact with skin. Harmful in contact with skin. Harmful in contact with skin.
<b>Ingestion</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Harmful if swallowed. Harmful if swallowed. Harmful if swallowed.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Ampoule 1  Ampoule 2  Ampoule 3	Adverse symptoms may include the following: pain or irritation watering redness 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>	: Ampoule 1 Ampoule 2 Ampoule 3	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No specific data. No specific data. No specific data.



## Section 4. First aid measures

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

<b>Notes to physician</b>	: Ampoule 1	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.
	Ampoule 2	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.
	Ampoule 3	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>	: Ampoule 1	No specific treatment.
	Ampoule 2	No specific treatment.
	Ampoule 3	No specific treatment.
<b>Protection of first-aiders</b>	: Ampoule 1	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.
	Ampoule 2	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.
	Ampoule 3	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. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Ampoule 1	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Ampoule 2	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	Ampoule 3	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: Ampoule 1	Do not use water jet.
	Ampoule 2	Do not use water jet.
	Ampoule 3	Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

## Section 5. Fire-fighting measures

<b>Specific hazards arising from the chemical</b>	: Ampoule 1	Highly flammable liquid and vapor. 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.
	Ampoule 2	Highly flammable liquid and vapor. 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.
	Ampoule 3	Highly flammable liquid and vapor. 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>	: Ampoule 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides cyanides
	Ampoule 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides cyanides
	Ampoule 3	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides cyanides
<b><u>5.3 Advice for firefighters</u></b>		
<b>Special protective actions for fire-fighters</b>	: Ampoule 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Ampoule 2	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.
	Ampoule 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

## Section 5. Fire-fighting measures

<b>Special protective equipment for fire-fighters</b>	: Ampoule 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Ampoule 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Ampoule 3	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: Ampoule 1	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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Ampoule 2	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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Ampoule 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: Ampoule 1	If specialized 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".
	Ampoule 2	If specialized 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".
	Ampoule 3	If specialized 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>6.2 Environmental precautions</b>	: Ampoule 1	Avoid dispersal of spilled 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).
	Ampoule 2	Avoid dispersal of spilled 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).
	Ampoule 3	Avoid dispersal of spilled 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).

### 6.3 Methods and materials for containment and cleaning up

<b>Methods for cleaning up</b>	: Ampoule 1	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.
	Ampoule 2	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.
	Ampoule 3	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

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: Ampoule 1	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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
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## Section 7. Handling and storage

containers retain product residue and can be hazardous. Do not reuse container.

Ampoule 2  
Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.

Ampoule 3  
Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.

### Advice on general occupational hygiene

: Ampoule 1  
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.

Ampoule 2  
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.

Ampoule 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.

## Section 7. Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

: Ampoule 1

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Ampoule 2

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Ampoule 3

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

#### Recommendations

: Ampoule 1  
Ampoule 2  
Ampoule 3

Industrial applications, Professional applications.  
Industrial applications, Professional applications.  
Industrial applications, Professional applications.

#### Industrial sector specific solutions

: Ampoule 1  
Ampoule 2  
Ampoule 3

Not applicable.  
Not applicable.  
Not applicable.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<p><b>Ampoule 1</b> Acetonitrile</p>	<p><b>ACGIH TLV (United States, 3/2017).</b> <b>Absorbed through skin.</b> TWA: 20 ppm 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours. STEL: 60 ppm 15 minutes. STEL: 105 mg/m<sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 20 ppm 10 hours. TWA: 34 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours.</p>
<p><b>Ampoule 2</b> Acetonitrile</p>	<p><b>ACGIH TLV (United States, 3/2017).</b> <b>Absorbed through skin.</b> TWA: 20 ppm 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours. STEL: 60 ppm 15 minutes. STEL: 105 mg/m<sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 20 ppm 10 hours. TWA: 34 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours.</p>
<p><b>Ampoule 3</b> Acetonitrile</p>	<p><b>ACGIH TLV (United States, 3/2017).</b> <b>Absorbed through skin.</b> TWA: 20 ppm 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours. STEL: 60 ppm 15 minutes. STEL: 105 mg/m<sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 20 ppm 10 hours. TWA: 34 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2016).</b> TWA: 40 ppm 8 hours. TWA: 70 mg/m<sup>3</sup> 8 hours.</p>

### 8.2 Exposure controls

## Section 8. Exposure controls/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, vapor 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

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Liquid. Liquid. Liquid.
<b>Color</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Not available. Not available. Not available.
<b>Odor</b>	: Ampoule 1 Ampoule 2 Ampoule 3	Not available. Not available. Not available.



## Section 9. Physical and chemical properties

<b>Odor threshold</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>pH</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Melting point</b>	: Ampoule 1	-41.9°C (-43.4°F)
	Ampoule 2	-41.9°C (-43.4°F)
	Ampoule 3	-41.9°C (-43.4°F)
<b>Boiling point</b>	: Ampoule 1	81.7°C (179.1°F)
	Ampoule 2	81.7°C (179.1°F)
	Ampoule 3	81.7°C (179.1°F)
<b>Flash point</b>	: Ampoule 1	Closed cup: 5.85°C (42.5°F)
	Ampoule 2	Closed cup: 5.85°C (42.5°F)
	Ampoule 3	Closed cup: 5.85°C (42.5°F)
<b>Evaporation rate</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Flammability (solid, gas)</b>	: Ampoule 1	Not applicable.
	Ampoule 2	Not applicable.
	Ampoule 3	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Vapor pressure</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Vapor density</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Relative density</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Solubility</b>	: Ampoule 1	Easily soluble in the following materials: cold water, hot water and acetone.
	Ampoule 2	Soluble in the following materials: methanol. Easily soluble in the following materials: cold water, hot water and acetone.
	Ampoule 3	Soluble in the following materials: methanol. Easily soluble in the following materials: cold water, hot water and acetone. Soluble in the following materials: methanol.
<b>Partition coefficient: n-octanol/water</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Auto-ignition temperature</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	524°C (975.2°F)
<b>Decomposition temperature</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.
<b>Viscosity</b>	: Ampoule 1	Not available.
	Ampoule 2	Not available.
	Ampoule 3	Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: Ampoule 1	No specific test data related to reactivity available for this product or its ingredients.
	Ampoule 2	No specific test data related to reactivity available for this product or its ingredients.
	Ampoule 3	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Ampoule 1	The product is stable.
	Ampoule 2	The product is stable.
	Ampoule 3	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Ampoule 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	Ampoule 2	Under normal conditions of storage and use, hazardous reactions will not occur.
	Ampoule 3	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Ampoule 1	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
	Ampoule 2	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
	Ampoule 3	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>10.5 Incompatible materials</b>	: Ampoule 1	Reactive or incompatible with the following materials: oxidizing materials
	Ampoule 2	Reactive or incompatible with the following materials: oxidizing materials
	Ampoule 3	Reactive or incompatible with the following materials: oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: Ampoule 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Ampoule 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Ampoule 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>Ampoule 1</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Ampoule 2</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Ampoule 3</b> Acetonitrile	LC50 Inhalation Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Ampoule 1</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>Ampoule 2</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>Ampoule 3</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-

#### Sensitization

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)

Not available.

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

## Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
<b>Ampoule 1</b> Acetonitrile	Category 2	Not determined	blood system, central nervous system (CNS), kidneys and liver
<b>Ampoule 2</b> Acetonitrile	Category 2	Not determined	blood system, central nervous system (CNS), kidneys and liver
<b>Ampoule 3</b> Acetonitrile	Category 2	Not determined	blood system, central nervous system (CNS), kidneys and liver

### Aspiration hazard

Not available.

<b>Information on the likely routes of exposure</b>	: Ampoule 1	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Ampoule 2	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Ampoule 3	Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

<b>Eye contact</b>	: Ampoule 1	Causes serious eye irritation.
	Ampoule 2	Causes serious eye irritation.
	Ampoule 3	Causes serious eye irritation.
<b>Inhalation</b>	: Ampoule 1	Harmful if inhaled.
	Ampoule 2	Harmful if inhaled.
	Ampoule 3	Harmful if inhaled.
<b>Skin contact</b>	: Ampoule 1	Harmful in contact with skin.
	Ampoule 2	Harmful in contact with skin.
	Ampoule 3	Harmful in contact with skin.
<b>Ingestion</b>	: Ampoule 1	Harmful if swallowed.
	Ampoule 2	Harmful if swallowed.
	Ampoule 3	Harmful if swallowed.

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

<b>Eye contact</b>	: Ampoule 1	Adverse symptoms may include the following: pain or irritation watering redness
	Ampoule 2	Adverse symptoms may include the following: pain or irritation watering redness
	Ampoule 3	Adverse symptoms may include the following: pain or irritation watering

## Section 11. Toxicological information

<b>Inhalation</b>	: Ampoule 1 Ampoule 2 Ampoule 3	redness No specific data. No specific data. No specific data.
<b>Skin contact</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No specific data. No specific data. No specific data.

### Delayed and immediate effects and also 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

<b>General</b>	: Ampoule 1 Ampoule 2 Ampoule 3	May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure.
<b>Carcinogenicity</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Developmental effects</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: Ampoule 1 Ampoule 2 Ampoule 3	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Route	ATE value
<b>Ampoule 1</b> Oral Dermal Inhalation (vapors)	555.6 mg/kg 1222.2 mg/kg 12.22 mg/l
<b>Ampoule 2</b> Oral Dermal Inhalation (vapors)	555.6 mg/kg 1222.3 mg/kg 12.22 mg/l
<b>Ampoule 3</b> Oral Dermal Inhalation (vapors)	500 mg/kg 1100 mg/kg 11 mg/l

### Other information

: <input checked="" type="checkbox"/> Ampoule 1	Not available.
Ampoule 2	Not available.
Ampoule 3	Not available.

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Ampoule 1</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days
<b>Ampoule 2</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days
<b>Ampoule 3</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days

### 12.2 Persistence and degradability

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Ampoule 1</b> Acetonitrile	-	-	Readily
<b>Ampoule 2</b> Acetonitrile	-	-	Readily
<b>Ampoule 3</b> Acetonitrile	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Ampoule 1</b> Acetonitrile	-0.34	3	low
<b>Ampoule 2</b> Acetonitrile	-0.34	3	low
<b>Ampoule 3</b> Acetonitrile	-0.34	3	low

### 12.4 Mobility in soil

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

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods** : The generation of waste should be avoided or minimized 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

[United States - RCRA Toxic hazardous waste "U" List](#)

## Section 13. Disposal considerations






Ingredient	CAS #	Status	Reference number
<input checked="" type="checkbox"/> <b>Ampoule 1</b> Acetonitrile (I,T)	75-05-8	Listed	U003
<b>Ampoule 2</b> Acetonitrile (I,T)	75-05-8	Listed	U003
<b>Ampoule 3</b> Acetonitrile (I,T)	75-05-8	Listed	U003

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	<input checked="" type="checkbox"/> UN1648	<input checked="" type="checkbox"/> UN1648	<input checked="" type="checkbox"/> UN1648	<input checked="" type="checkbox"/> UN1648	<input checked="" type="checkbox"/> UN1648
UN proper shipping name	Acetonitrile	ACETONITRILE	ACETONITRILO	ACETONITRILE	Acetonitrile
Transport hazard class(es)	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
Packing group	II	II	II	II	II
Environmental hazards	<input checked="" type="checkbox"/> No.	No.	No.	No.	No.

### Additional information

**Remarks:** Excepted Quantity

#### DOT Classification

- : **Reportable quantity** 5357.2 lbs / 2432.2 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- Limited quantity** Yes.
- Packaging instruction** Exceptions: 150. Non-bulk: 202. Bulk: 242.
- Quantity limitation** Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
- Special provisions** IB2, T7, TP2

#### TDG Classification

- :  Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).
- Explosive Limit and Limited Quantity Index** 1
- Passenger Carrying Road or Rail Index** 5

#### IMDG

- :  **Emergency schedules** F-E, S-D



## Section 14. Transport information

- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353.  
Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.
- 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

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- U.S. Federal regulations** : **TSCA 8(a) PAIR:** Acetonitrile  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 307:** Acetonitrile

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

#### SARA 302/304

##### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

#### SARA 311/312

<b>Classification</b>	: <b>Ampoule 1</b>	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2
	<b>Ampoule 2</b>	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2
	<b>Ampoule 3</b>	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

## Section 15. Regulatory information

EYE IRRITATION - Category 2A  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

### Composition/information on ingredients

Name	%	Classification
<b>Ampoule 1</b> Acetonitrile	≥90	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2
<b>Ampoule 2</b> Acetonitrile	≥90	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2
<b>Ampoule 3</b> Acetonitrile	≥90	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	<b>Ampoule 1</b> Acetonitrile	75-05-8	≥90
	<b>Ampoule 2</b> Acetonitrile	75-05-8	≥90
	<b>Ampoule 3</b> Acetonitrile	75-05-8	≥90
<b>Supplier notification</b>	<b>Ampoule 1</b> Acetonitrile	75-05-8	≥90
	<b>Ampoule 2</b> Acetonitrile	75-05-8	≥90
	<b>Ampoule 3</b> Acetonitrile	75-05-8	≥90

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: ACETONITRILE  
**New York** : The following components are listed: Acetonitrile; Ethanenitrile  
**New Jersey** : The following components are listed: ACETONITRILE; CYANOMETHANE  
**Pennsylvania** : The following components are listed: ACETONITRILE

### International regulations

## Section 15. Regulatory information

### 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

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

## Section 16. Other information

### History

<b>Date of issue</b>	: 05/23/2018
<b>Date of previous issue</b>	: 03/09/2017
<b>Version</b>	: 7

### Procedure used to derive the classification

Classification	Justification
<b>Ampoule 1</b> FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method
<b>Ampoule 2</b> FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4	On basis of test data Calculation method

## Section 16. Other information

ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2	Calculation method Calculation method Calculation method Calculation method
<b>Ampoule 3</b> FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

✔ Indicates information that has changed from previously issued version.

### [Notice to reader](#)

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