

# SAFETY DATA SHEET



ES-TOF Biopolymer Analysis Reference Mass Standards Kit, Part Number G1969-85003

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

<b>Product name</b>	: ES-TOF Biopolymer Analysis Reference Mass Standards Kit, Part Number G1969-85003
<b>Part No. (Kit)</b>	: G1969-85003
<b>Part No.</b>	: 1.0 M Ammonium formate in deionized, nanopure water Compound 1
	5mM Purine in Acetonitrile Solution Compound 2
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Compound 3
	0.1 mM Hexamethoxyphosphazine in acetonitrile Compound 4
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Compound 5
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Compound 6
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Compound 7

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

#### Identified uses

Reagents and Standards for Analytical Chemistry Laboratory Use	
1.0 M Ammonium formate in deionized, nanopure water	2.2 ml
5mM Purine in Acetonitrile Solution	2.2 ml
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	2.2 ml
0.1 mM Hexamethoxyphosphazine in acetonitrile	2.2 ml
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	2.2 ml
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	2.2 ml
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	2.2 ml

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

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

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### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

<b>Product definition</b>	:	1.0 M Ammonium formate in deionized, nanopure water	Mixture
		5mM Purine in Acetonitrile Solution	Mixture
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Mixture
		0.1 mM Hexamethoxyphosphazine in acetonitrile	Mixture
		0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Mixture
		0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Mixture
		0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

##### **5mM Purine in Acetonitrile Solution**

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

##### **0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile**

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

##### **0.1 mM Hexamethoxyphosphazine in acetonitrile**

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H312	ACUTE TOXICITY (dermal) - Category 4
H332	ACUTE TOXICITY (inhalation) - Category 4

## SECTION 2: Hazards identification

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

**0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile**

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

**0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile**

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

**0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile**

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

**Ingredients of unknown toxicity** : 1.0 M Ammonium formate in deionized, nanopure water Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%

**Ingredients of unknown ecotoxicity** : 1.0 M Ammonium formate in deionized, nanopure water Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 6.3%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

## SECTION 2: Hazards identification

<b>Hazard pictograms</b>	: 5mM Purine in Acetonitrile Solution	 
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	 
	0.1 mM Hexamethoxyphosphazine in acetonitrile	 
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	 
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	 
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	 
<b>Signal word</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No signal word.
	5mM Purine in Acetonitrile Solution	Danger
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Danger
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Danger
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Danger
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Danger
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Danger
<b>Hazard statements</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	H225 - Highly flammable liquid and vapour.
		H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.

## SECTION 2: Hazards identification

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	H319 - Causes serious eye irritation. H225 - Highly flammable liquid and vapour.
0.1 mM Hexamethoxyphosphazine in acetonitrile	H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation. H225 - Highly flammable liquid and vapour.
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation. H225 - Highly flammable liquid and vapour.
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation. H225 - Highly flammable liquid and vapour.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation. H225 - Highly flammable liquid and vapour.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation.

### Precautionary statements

#### Prevention

: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	Not applicable.  P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
0.1 mM Hexamethoxyphosphazine in acetonitrile	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.

## SECTION 2: Hazards identification

	phosphazine in acetonitrile	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
<b>Response</b>	: 1.0 M Ammonium formate in deionized, nanopure water	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	5mM Purine in Acetonitrile Solution	Not applicable.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<b>Storage</b>	: 1.0 M Ammonium formate in deionized, nanopure water	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	5mM Purine in Acetonitrile Solution	Not applicable.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Not applicable.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Not applicable.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in	Not applicable.

## SECTION 2: Hazards identification

	acetonitrile 0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	Not applicable.
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	Not applicable.
<b>Disposal</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not applicable.
	5mM Purine in Acetonitrile Solution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not applicable.
	5mM Purine in Acetonitrile Solution	- acetonitrile
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	- acetonitrile
	0.1 mM Hexamethoxyphosphazine in acetonitrile	- acetonitrile
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	- acetonitrile
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	- acetonitrile
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	- acetonitrile

## SECTION 2: Hazards identification

**Supplemental label elements** : 1.0 M Ammonium formate in deionized, nanopure water Safety data sheet available on request.  
 5mM Purine in Acetonitrile Solution Not applicable.  
 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Not applicable.  
 0.1 mM Hexamethoxyphosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Not applicable.  
 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : 1.0 M Ammonium formate in deionized, nanopure water Not applicable.  
 5mM Purine in Acetonitrile Solution Not applicable.  
 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Not applicable.  
 0.1 mM Hexamethoxyphosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Not applicable.  
 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Not applicable.

### Special packaging requirements

**Tactile warning of danger** : 1.0 M Ammonium formate in deionized, nanopure water Not applicable.  
 5mM Purine in Acetonitrile Solution Not applicable.  
 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Not applicable.  
 0.1 mM Hexamethoxyphosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not applicable.

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4H-hexafluorobutyloxy) phosphazine in acetonitrile  
 0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile Not applicable.  
 0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Not applicable.

### 2.3 Other hazards

**Other hazards which do not result in classification** :

- 17.0 M Ammonium formate in deionized, nanopure water None known.
- 5mM Purine in Acetonitrile Solution None known.
- 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile None known.
- 0.1 mM Hexamethoxyphosphazine in acetonitrile None known.
- 0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile None known.
- 0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile None known.
- 0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile None known.

## SECTION 3: Composition/information on ingredients

**3.1 Substances** :

- 17.0 M Ammonium formate in deionized, nanopure water Mixture
- 5mM Purine in Acetonitrile Solution Mixture
- 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Mixture
- 0.1 mM Hexamethoxyphosphazine in acetonitrile Mixture
- 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile Mixture
- 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)phosphazine in acetonitrile Mixture
- 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Mixture

### SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<b>1.0 M Ammonium formate in deionized, nanopure water</b> Ammonium formate	EC: 208-753-9 CAS: 540-69-2	<10	Eye Irrit. 2, H319	[1]
<b>5mM Purine in Acetonitrile Solution</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥75 - ≤90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</b> Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]

## SECTION 3: Composition/information on ingredients

			See Section 16 for the full text of the H statements declared above.	
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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.

### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Eye contact

- : 1.0 M Ammonium formate in deionized, nanopure water  
5mM Purine in Acetonitrile Solution  
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. 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.
- 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile  
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.
- 0.1 mM Hexamethoxyphosphazine in acetonitrile  
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.
- 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile  
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.
- 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile  
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.
- 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile  
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.

#### Inhalation

- : 1.0 M Ammonium formate in deionized, nanopure water  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.
- 5mM Purine in Acetonitrile Solution  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery

## SECTION 4: First aid measures

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile

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.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

0.1 mM Hexamethoxyphosphazine in acetonitrile

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health

## SECTION 4: First aid measures

		<p>effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
	<p>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</p>	<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 if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
<b>Skin contact</b>	<p>: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution</p>	<p>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</p> <p>Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>
	<p>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</p>	<p>Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>
	<p>0.1 mM Hexamethoxyphosphazine in acetonitrile</p>	<p>Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>
	<p>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</p>	<p>Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>
	<p>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</p>	<p>Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.</p>

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Ingestion	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	1.0 M Ammonium formate in deionized, nanopure water	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	5mM Purine in Acetonitrile Solution	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile	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,

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0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has 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.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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.
<b>Protection of first-aiders</b> : 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	No action shall be taken involving any personal risk or without suitable training.  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.
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
0.1 mM Hexamethoxyphosphazine in acetonitrile	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.
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in	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

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acetonitrile	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.
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	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.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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.

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

#### Potential acute health effects

<b>Eye contact</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	Causes serious eye irritation.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Causes serious eye irritation.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Causes serious eye irritation.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Causes serious eye irritation.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Causes serious eye irritation.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Causes serious eye irritation.
<b>Inhalation</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	Harmful if inhaled.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Harmful if inhaled.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Harmful if inhaled.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Harmful if inhaled.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Harmful if inhaled.

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	6H-decafluorohexyloxy) phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Harmful if inhaled.
<b>Skin contact</b>	: 0 M Ammonium formate in deionized, nanopure water	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	0.1 mM Hexamethoxyphosphazine in acetonitrile	Harmful in contact with skin.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Harmful in contact with skin.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile		Harmful in contact with skin.
<b>Ingestion</b>	: 0 M Ammonium formate in deionized, nanopure water	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	0.1 mM Hexamethoxyphosphazine in acetonitrile	Harmful if swallowed.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Harmful if swallowed.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile		Harmful if swallowed.

### Over-exposure signs/symptoms

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<b>Eye contact</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	No specific data.  Adverse symptoms may include the following:  pain or irritation watering redness
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Adverse symptoms may include the following:  pain or irritation watering redness
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Adverse symptoms may include the following:  pain or irritation watering redness
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following:  pain or irritation watering redness
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following:  pain or irritation watering redness
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following:  pain or irritation watering redness
<b>Inhalation</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	No specific data.  No specific data.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No specific data.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific data.

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	8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	
<b>Skin contact</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No specific data.
	5mM Purine in Acetonitrile Solution	No specific data.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No specific data.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific data.
<b>Ingestion</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No specific data.
	5mM Purine in Acetonitrile Solution	No specific data.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No specific data.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No specific data.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

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<b>Notes to physician</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution  0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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. 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. 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. 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. 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. 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. 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>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM	Use an extinguishing agent suitable for the surrounding fire.  Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.  Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.  Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
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## SECTION 5: Firefighting measures

	Hexamethoxyphosphazine in acetonitrile	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	1.0 M Ammonium formate in deionized, nanopure water	None known.
	5mM Purine in Acetonitrile Solution	Do not use water jet.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Do not use water jet.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Do not use water jet.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Do not use water jet.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Do not use water jet.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Do not use water jet.

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

<b>Hazards from the substance or mixture</b>	1.0 M Ammonium formate in deionized, nanopure water	In a fire or if heated, a pressure increase will occur and the container may burst.
	5mM Purine in Acetonitrile Solution	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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,

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	<p>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</p>	<p>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. 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.</p>
	<p>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</p>	<p>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.</p>
	<p>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</p>	<p>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.</p>
<p><b>Hazardous combustion products</b></p>	<p>: 1.0 M Ammonium formate in deionized, nanopure water</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides</p>
	<p>5mM Purine in Acetonitrile Solution</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides</p>
	<p>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides</p>
	<p>0.1 mM Hexamethoxyphosphazine in acetonitrile</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides</p>
	<p>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides</p>
	<p>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in</p>	<p>Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides</p>

## SECTION 5: Firefighting measures

acetonitrile

carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides

0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile

Decomposition products may include the following materials:

carbon dioxide  
carbon monoxide  
nitrogen oxides  
cyanides

### 5.3 Advice for firefighters

#### Special precautions for fire-fighters

: 1.0 M Ammonium formate in deionized, nanopure water  
5mM Purine in Acetonitrile Solution

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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.

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile

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.

0.1 mM Hexamethoxyphosphazine in acetonitrile

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.

0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile

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.

0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile

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.

0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile

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.

#### Special protective equipment for fire-fighters

: 1.0 M Ammonium formate in deionized, nanopure water

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

5mM Purine in Acetonitrile Solution

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 5: Firefighting measures

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
0.1 mM Hexamethoxyphosphazine in acetonitrile	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

: 0.0 M Ammonium formate in deionized, nanopure water	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. Put on appropriate personal protective equipment.
5mM Purine in Acetonitrile Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
0.1 mM Hexamethoxyphosphazine in acetonitrile	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

## SECTION 6: Accidental release measures

		area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	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.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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>	: 1.0 M Ammonium formate in deionized, nanopure water	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".
	5mM Purine in Acetonitrile Solution	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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".
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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".
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	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".
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	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".
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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>6.2 Environmental precautions</b>	: 1.0 M Ammonium formate in deionized, nanopure water	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).
	5mM Purine in Acetonitrile Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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).
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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).
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	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).
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	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).
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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).

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

<b>Methods for cleaning up</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	5mM Purine in Acetonitrile Solution	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H,	Stop leak if without risk. Move containers from spill area.

## SECTION 6: Accidental release measures

6H-decafluorohexyloxy) phosphazine in acetonitrile	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.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	:	17.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	Put on appropriate personal protective equipment (see Section 8).  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.
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
		0.1 mM Hexamethoxyphosphazine in acetonitrile	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

## SECTION 7: Handling and storage

0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile

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.

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.

0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile

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.

0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile

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.

### Advice on general occupational hygiene

: 7.0 M Ammonium formate in deionized, nanopure water

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.

5mM Purine in Acetonitrile Solution

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also

## SECTION 7: Handling and storage

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile

Section 8 for additional information on hygiene measures. 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.

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.

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.

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.

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.

0.1 mM Hexamethoxyphosphazine in acetonitrile

0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile

0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile

0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile

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

#### Storage

: 0.0 M Ammonium formate in deionized, nanopure water

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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.

5mM Purine in Acetonitrile Solution

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile

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

## SECTION 7: Handling and storage

	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.
0.1 mM Hexamethoxyphosphazine in acetonitrile	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Danger criteria

## SECTION 7: Handling and storage

Category	Notification and MAPP threshold	Safety report threshold
5mM Purine in Acetonitrile Solution P5c	5000	50000
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile P5c	5000	50000
0.1 mM Hexamethoxyphosphazine in acetonitrile P5c	5000	50000
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile P5c	5000	50000
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile P5c	5000	50000
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile P5c	5000	50000

### 7.3 Specific end use(s)

#### Recommendations

- : 1.0 M Ammonium formate in deionized, nanopure water  
Industrial applications, Professional applications.
- 5mM Purine in Acetonitrile Solution  
Industrial applications, Professional applications.
- 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile  
Industrial applications, Professional applications.
- 0.1 mM Hexamethoxyphosphazine in acetonitrile  
Industrial applications, Professional applications.
- 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile  
Industrial applications, Professional applications.
- 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile  
Industrial applications, Professional applications.
- 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile  
Industrial applications, Professional applications.

#### Industrial sector specific solutions

- : 1.0 M Ammonium formate in deionized, nanopure water  
Not applicable.
- 5mM Purine in Acetonitrile Solution  
Not applicable.
- 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile  
Not applicable.
- 0.1 mM Hexamethoxyphosphazine  
Not applicable.

## SECTION 7: Handling and storage

in acetonitrile  
 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not applicable.  
 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Not applicable.  
 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>5mM Purine in Acetonitrile Solution</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)phosphazine in acetonitrile</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours.

## SECTION 8: Exposure controls/personal protection

**0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile**  
Acetonitrile

TWA: 68 mg/m<sup>3</sup> 8 hours.

**EH40/2005 WELs (United Kingdom (UK), 12/2011).**

STEL: 102 mg/m<sup>3</sup> 15 minutes.

STEL: 60 ppm 15 minutes.

TWA: 40 ppm 8 hours.

TWA: 68 mg/m<sup>3</sup> 8 hours.

### Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

No DNELs/DMELs available.

### PNECs

No PNECs available

## 8.2 Exposure controls

### 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.

### 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.

## SECTION 8: Exposure controls/personal protection

- 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. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- 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.
- 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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** :
- 1.0 M Ammonium formate in deionized, nanopure water Liquid.
  - 5mM Purine in Acetonitrile Solution Liquid.
  - 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Liquid.
  - 0.1 mM Hexamethoxyphosphazine in acetonitrile Liquid.
  - 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Liquid.
  - 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Liquid.
  - 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Liquid.
- Colour** :
- 1.0 M Ammonium formate in deionized, nanopure water Not available.
  - 5mM Purine in Acetonitrile Solution Not available.
  - 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Not available.
  - 0.1 mM Hexamethoxyphosphazine in acetonitrile Not available.
  - 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not available.

**SECTION 9: Physical and chemical properties**

	acetonitrile	
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	Not available.
	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Not available.
<b>Odour</b>	: 7.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	Ether-like
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Ether-like
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Ether-like
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	Ether-like
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	Ether-like
	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Ether-like
<b>Odour threshold</b>	: 7.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	70 ppm
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	70 ppm
	0.1 mM Hexamethoxyphosphazine in acetonitrile	70 ppm
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	70 ppm
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	70 ppm
	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	70 ppm

## SECTION 9: Physical and chemical properties

<b>pH</b>	: 0.0 M Ammonium formate in deionized, nanopure water	Not available.	
	5mM Purine in Acetonitrile Solution	Not available.	
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Not available.	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Not available.	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Not available.	
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Not available.	
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Not available.	
	<b>Melting point/freezing point</b>	: 0.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	-45°C	
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	-45°C		
0.1 mM Hexamethoxyphosphazine in acetonitrile	-45°C		
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	-45°C		
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	-45°C		
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	-45°C		
<b>Initial boiling point and boiling range</b>	: 0.0 M Ammonium formate in deionized, nanopure water	Not available.	
	5mM Purine in Acetonitrile Solution	Not available.	
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	81.6°C	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	81.6°C	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)	81.6°C	

**SECTION 9: Physical and chemical properties**

	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	81.6°C
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	81.6°C
<b>Flash point</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Not available.
	5mM Purine in Acetonitrile Solution		Closed cup: -18 to 23°C
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Closed cup: 12.8°C
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Closed cup: 12.8°C
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy)		Closed cup: 12.8°C
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	Closed cup: 12.8°C
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	Closed cup: 12.8°C
<b>Evaporation rate</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Not available.
	5mM Purine in Acetonitrile Solution		5.79 (butyl acetate = 1)
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile		5.79 (butyl acetate = 1)
	0.1 mM Hexamethoxyphosphazine in acetonitrile		5.79 (butyl acetate = 1)
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy)		5.79 (butyl acetate = 1)
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	5.79 (butyl acetate = 1)
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	5.79 (butyl acetate = 1)
	phosphazine in acetonitrile		

## SECTION 9: Physical and chemical properties

<b>Flammability (solid, gas)</b>	: 0.0 M Ammonium formate in deionized, nanopure water	Not applicable.	
	5mM Purine in Acetonitrile Solution	Not applicable.	
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5-triazine in acetonitrile	Not applicable.	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Not applicable.	
	0.2 mM Hexakis(1H, 1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Not applicable.	
	0.2 mM Hexakis(1H, 1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Not applicable.	
	0.5 mM Hexakis(1H, 1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Not applicable.	
	<b>Upper/lower flammability or explosive limits</b>	: 0.0 M Ammonium formate in deionized, nanopure water	Not available.
		5mM Purine in Acetonitrile Solution	Lower: 4.4%
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5-triazine in acetonitrile	Upper: 16% Lower: 4.4%	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Upper: 16% Lower: 4.4%	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Upper: 16% Lower: 4.4%	
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Upper: 16% Lower: 4.4%	
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Upper: 16% Lower: 4.4%	
		Upper: 16%	

## SECTION 9: Physical and chemical properties

<b>Vapour pressure</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	11.6 kPa [room temperature]
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	11.6 kPa [room temperature]
	0.1 mM Hexamethoxyphosphazine in acetonitrile	11.6 kPa [room temperature]
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	11.6 kPa [room temperature]
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	11.6 kPa [room temperature]
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	11.6 kPa [room temperature]
<b>Vapour density</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	1.42 [Air = 1]
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	1.42 [Air = 1]
	0.1 mM Hexamethoxyphosphazine in acetonitrile	1.42 [Air = 1]
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	1.42 [Air = 1]
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	1.42 [Air = 1]
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	1.42 [Air = 1]
<b>Relative density</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	0.787
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	0.787
	0.1 mM Hexamethoxyphosphazine in acetonitrile	0.787
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)	0.787

## SECTION 9: Physical and chemical properties

	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	0.787
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	0.787
<b>Solubility(ies)</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Easily soluble in the following materials: cold water and hot water.
	5mM Purine in Acetonitrile Solution		Soluble in the following materials: cold water and hot water.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Soluble in the following materials: cold water and hot water.
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Soluble in the following materials: cold water and hot water.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy)		Soluble in the following materials: cold water and hot water.
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	Soluble in the following materials: cold water and hot water.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Not available.
	5mM Purine in Acetonitrile Solution		Not available.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Not available.
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Not available.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy)		Not available.
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy)	Not available.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy)	Not available.
	phosphazine in acetonitrile		

## SECTION 9: Physical and chemical properties

<b>Auto-ignition temperature</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not available.	
	5mM Purine in Acetonitrile Solution	524°C	
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	524°C	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	524°C	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	524°C	
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	524°C	
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	524°C	
	<b>Decomposition temperature</b>	: 1.0 M Ammonium formate in deionized, nanopure water	Not available.
		5mM Purine in Acetonitrile Solution	Not available.
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Not available.	
0.1 mM Hexamethoxyphosphazine in acetonitrile		Not available.	
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile		Not available.	
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile		Not available.	
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile		Not available.	
<b>Viscosity</b>		: 1.0 M Ammonium formate in deionized, nanopure water	Not available.
		5mM Purine in Acetonitrile Solution	Not available.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Not available.	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Not available.	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)	Not available.	

## SECTION 9: Physical and chemical properties

	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)	Not available.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)	Not available.
<b>Explosive properties</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Not available.
	5mM Purine in Acetonitrile Solution		Not available.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Not available.
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Not available.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)		Not available.
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)	Not available.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)	Not available.
<b>Oxidising properties</b>	: 7.0 M Ammonium formate in deionized, nanopure water		Not available.
	5mM Purine in Acetonitrile Solution		Not available.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Not available.
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Not available.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)		Not available.
	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)	Not available.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)	Not available.

### 9.2 Other information

## SECTION 9: Physical and chemical properties

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

## SECTION 10: Stability and reactivity

triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur.
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<b>10.4 Conditions to avoid</b>	: 17.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	No specific data.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	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.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	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.
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	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.
	0.5 mM Hexakis(1H,1H, 8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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>10.5 Incompatible materials</b>	: 17.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution	May react or be incompatible with oxidising materials.  Reactive or incompatible with the following materials:  oxidizing materials
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Reactive or incompatible with the following materials:  oxidizing materials
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Reactive or incompatible with the following materials:  oxidizing materials

## SECTION 10: Stability and reactivity

0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Reactive or incompatible with the following materials:  oxidizing materials
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Reactive or incompatible with the following materials:  oxidizing materials
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Reactive or incompatible with the following materials:  oxidizing materials

### 10.6 Hazardous decomposition products

1.0 M Ammonium formate in deionized, nanopure water	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
5mM Purine in Acetonitrile Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
0.1 mM Hexamethoxyphosphazine in acetonitrile	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	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
5mM Purine in Acetonitrile Solution Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
0.1 mM Hexamethoxyphosphazine				

## SECTION 11: Toxicological information

<b>in acetonitrile</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -

### Acute toxicity estimates

Route	ATE value
<b>5mM Purine in Acetonitrile Solution</b> Oral Dermal Inhalation (vapours)	555.9 mg/kg 1222.9 mg/kg 12.23 mg/l
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Oral Dermal Inhalation (vapours)	500.1 mg/kg 1100.2 mg/kg 11 mg/l
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Oral Dermal Inhalation (vapours)	500 mg/kg 1100 mg/kg 11 mg/l
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile</b> Oral Dermal Inhalation (vapours)	500.1 mg/kg 1100.2 mg/kg 11 mg/l
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)phosphazine in acetonitrile</b> Oral Dermal Inhalation (vapours)	500.2 mg/kg 1100.4 mg/kg 11 mg/l
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile</b> Oral Dermal Inhalation (vapours)	500.6 mg/kg 1101.3 mg/kg 11.01 mg/l

### Irritation/Corrosion

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>5mM Purine in Acetonitrile Solution</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-

### Sensitiser

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

## SECTION 11: Toxicological information

<b>Information on likely routes of exposure</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Not available.  Routes of entry anticipated: Oral, Dermal, Inhalation.  Routes of entry anticipated: Oral, Dermal, Inhalation.
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### Potential acute health effects

<b>Inhalation</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.  Harmful if inhaled.  Harmful if inhaled.  Harmful if inhaled.  Harmful if inhaled.  Harmful if inhaled.  Harmful if inhaled.
<b>Ingestion</b>	: 1.0 M Ammonium formate in deionized, nanopure water 5mM Purine in Acetonitrile Solution 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile 0.1 mM Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.  Harmful if swallowed.  Harmful if swallowed.  Harmful if swallowed.  Harmful if swallowed.

## SECTION 11: Toxicological information

	4H-hexafluorobutyloxy) phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Harmful if swallowed.
		0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Harmful if swallowed.
<b>Skin contact</b>	: 0.0 M Ammonium formate in deionized, nanopure water	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Harmful in contact with skin.
		0.1 mM Hexamethoxyphosphazine in acetonitrile	Harmful in contact with skin.
		0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Harmful in contact with skin.
		0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Harmful in contact with skin.
		0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Harmful in contact with skin.
<b>Eye contact</b>	: 0.0 M Ammonium formate in deionized, nanopure water	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Causes serious eye irritation.
		0.1 mM Hexamethoxyphosphazine in acetonitrile	Causes serious eye irritation.
		0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Causes serious eye irritation.
		0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Causes serious eye irritation.
		0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Causes serious eye irritation.

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

## SECTION 11: Toxicological information

<b>Inhalation</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No specific data.	
	5mM Purine in Acetonitrile Solution	No specific data.	
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.	
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No specific data.	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No specific data.	
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No specific data.	
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No specific data.	
	<b>Ingestion</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No specific data.
		5mM Purine in Acetonitrile Solution	No specific data.
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.
0.1 mM Hexamethoxyphosphazine in acetonitrile		No specific data.	
0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile		No specific data.	
0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile		No specific data.	
0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile		No specific data.	
<b>Skin contact</b>		: 1.0 M Ammonium formate in deionized, nanopure water	No specific data.
		5mM Purine in Acetonitrile Solution	No specific data.
		0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No specific data.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No specific data.	
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)	No specific data.	

## SECTION 11: Toxicological information

	phosphazine in acetonitrile	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)	No specific data.
	phosphazine in acetonitrile	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)	No specific data.
<b>Eye contact</b>	: 0.0 M Ammonium formate in deionized, nanopure water	5mM Purine in Acetonitrile Solution	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile		Adverse symptoms may include the following: pain or irritation watering redness
	0.1 mM Hexamethoxyphosphazine in acetonitrile		Adverse symptoms may include the following: pain or irritation watering redness
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile		Adverse symptoms may include the following: pain or irritation watering redness
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile		Adverse symptoms may include the following: pain or irritation watering redness
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile		Adverse symptoms may include the following: pain or irritation watering redness

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No known significant effects or critical hazards.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No known significant effects or critical hazards.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5	No known significant effects or critical hazards.

## SECTION 11: Toxicological information

	triazine in acetonitrile 0.1 mM	No known significant effects or critical hazards.
	Hexamethoxyphosphazine in acetonitrile 0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No known significant effects or critical hazards.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
<b>Developmental effects</b>	: 1.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4, 6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No known significant effects or critical hazards.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H, 4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H, 6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H, 8H- tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.

## SECTION 11: Toxicological information

	8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	
<b>Fertility effects</b>	: 7.0 M Ammonium formate in deionized, nanopure water	No known significant effects or critical hazards.
	5mM Purine in Acetonitrile Solution	No known significant effects or critical hazards.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	No known significant effects or critical hazards.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	No known significant effects or critical hazards.
<b>Other information</b>	: 7.0 M Ammonium formate in deionized, nanopure water	Not available.
	5mM Purine in Acetonitrile Solution	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
	0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
	0.1 mM Hexamethoxyphosphazine in acetonitrile	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
	0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
	0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
	0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>5mM Purine in Acetonitrile Solution</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>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</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>0.1 mM Hexamethoxyphosphazine in acetonitrile</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>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</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>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</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>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</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

## SECTION 12: Ecological information

### 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>5mM Purine in Acetonitrile Solution</b> Acetonitrile	-	-	Readily
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Acetonitrile	-	-	Readily
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Acetonitrile	-	-	Readily
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</b> Acetonitrile	-	-	Readily
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</b> Acetonitrile	-	-	Readily
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</b> Acetonitrile	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>5mM Purine in Acetonitrile Solution</b> Acetonitrile	-0.34	3	low
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Acetonitrile	-0.34	3	low
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Acetonitrile	-0.34	3	low
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile</b> Acetonitrile	-0.34	3	low
<b>0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile</b> Acetonitrile	-0.34	3	low

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## SECTION 12: Ecological information

Acetonitrile	-0.34	3	low
<b>0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile</b>			
Acetonitrile	-0.34	3	low

### 12.4 Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : Not available.

Mobility : Not available.

### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : 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.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : 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

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN3316	UN3316	UN3316
<b>14.2 UN proper shipping name</b>	CHEMICAL KIT	CHEMICAL KIT	Chemical kit
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 

ES-TOF Biopolymer Analysis Reference Mass Standards Kit, Part Number G1969-85003

## SECTION 14: Transport information

14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.

### Additional information

Remarks : Excepted Quantity

- ADR/RID** : **Hazard identification number** 90  
**Limited quantity** See SP 251  
**Special provisions** 251, 340  
**Tunnel code** (E)
- IMDG** : **Emergency schedules** F-A, \_S-P\_  
**Special provisions** 251, 340
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.  
**Special provisions** A44, A163

**14.6 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.

**14.7 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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** :
- 0 M Ammonium formate in deionized, nanopure water Not applicable.
  - 5mM Purine in Acetonitrile Solution Not applicable.
  - 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile Not applicable.
  - 0.1 mM Hexamethoxyphosphazine in acetonitrile Not applicable.
  - 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile Not applicable.
  - 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile Not applicable.
  - 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy) phosphazine in acetonitrile Not applicable.

Other EU regulations

Date of issue/Date of revision : 20/01/2018

58/63

## SECTION 15: Regulatory information

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Listed

### Ozone depleting substances (1005/2009/EU)

Not listed.

### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

##### Category

##### **5mM Purine in Acetonitrile Solution**

P5c

##### **0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile**

P5c

##### **0.1 mM Hexamethoxyphosphazine in acetonitrile**

P5c

##### **0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile**

P5c

##### **0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)phosphazine in acetonitrile**

P5c

##### **0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile**

P5c

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

**Europe** : Not determined.

## SECTION 15: Regulatory information

<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>	: Not determined.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
<b>5mM Purine in Acetonitrile Solution</b> Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	On basis of test data Calculation method Calculation method Calculation method Calculation method
<b>0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile</b> Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	On basis of test data Calculation method Calculation method Calculation method Calculation method
<b>0.1 mM Hexamethoxyphosphazine in acetonitrile</b> Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	On basis of test data Calculation method Calculation method Calculation method Calculation method
<b>0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy)phosphazine in acetonitrile</b> Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	On basis of test data Calculation method Calculation method Calculation method Calculation method

## SECTION 16: Other information

### 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy)phosphazine in acetonitrile

Flam. Liq. 2, H225  
Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319

On basis of test data  
Calculation method  
Calculation method  
Calculation method  
Calculation method

### 0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile

Flam. Liq. 2, H225  
Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319

On basis of test data  
Calculation method  
Calculation method  
Calculation method  
Calculation method

### Full text of abbreviated H statements

#### 1.0 M Ammonium formate in deionized, nanopure water

H319

Causes serious eye irritation.

#### 5mM Purine in Acetonitrile Solution

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

#### 0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

#### 0.1 mM Hexamethoxyphosphazine in acetonitrile

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

#### 0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

#### 0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

#### 0.5 mM Hexakis(1H,1H,8H-

## SECTION 16: Other information

### tetradecafluorooctyloxy)phosphazine in acetonitrile

H225  
H302  
H312  
H319  
H332

Highly flammable liquid and vapour.  
Harmful if swallowed.  
Harmful in contact with skin.  
Causes serious eye irritation.  
Harmful if inhaled.

### [Full text of classifications \[CLP/GHS\]](#)

#### **7.0 M Ammonium formate in deionized, nanopure water**

Eye Irrit. 2, H319

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

#### **5mM Purine in Acetonitrile Solution**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

#### **0.5 mM Tris(2,4,6-trifluoromethyl)-1,3,5 triazine in acetonitrile**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

#### **0.1 mM Hexamethoxyphosphazine in acetonitrile**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

#### **0.2 mM Hexakis(1H,1H,4H-hexafluorobutyloxy) phosphazine in acetonitrile**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

#### **0.2 mM Hexakis(1H,1H,6H-decafluorohexyloxy) phosphazine in acetonitrile**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

#### **0.5 mM Hexakis(1H,1H,8H-tetradecafluorooctyloxy)phosphazine in acetonitrile**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332  
Eye Irrit. 2, H319  
Flam. Liq. 2, H225

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

*ES-TOF Biopolymer Analysis Reference Mass Standards Kit, Part Number G1969-85003*

## **SECTION 16: Other information**

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