

# SAFETY DATA SHEET



Forensic Toxicology Comprehensive Mix - Submix 9, Part Number 5190-0564

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

### 1.1 Product identifier

<b>Product name</b>	:	Forensic Toxicology Comprehensive Mix - Submix 9, Part Number 5190-0564
<b>Part no. (chemical kit)</b>	:	5190-0564
<b>Part no.</b>	:	Forensic Toxicology Comprehensive Mix – Submix 9A 5190-0564A
		Forensic Toxicology Comprehensive Mix – Submix 9B 5190-0564B
		Forensic Toxicology Comprehensive Mix – Submix 9C 5190-0564C
		Forensic Toxicology Comprehensive Mix – Submix 9D 5190-0564D

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

<b>Material uses</b>	:	Reagents and Standards for Analytical Chemistry Laboratory Use
		Forensic Toxicology Comprehensive Mix – 1 ml Submix 9A
		Forensic Toxicology Comprehensive Mix – 1 ml Submix 9B
		Forensic Toxicology Comprehensive Mix – 1 ml Submix 9C
		Forensic Toxicology Comprehensive Mix – 1 ml Submix 9D

### 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

### 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>	:	Forensic Toxicology Comprehensive Mix – Submix 9A Mixture
		Forensic Toxicology Comprehensive Mix – Submix 9B Mixture
		Forensic Toxicology Mixture

**Date of issue/Date of revision** : 14/08/2018

## SECTION 2: Hazards identification

Comprehensive Mix –  
Submix 9C  
Forensic Toxicology Mixture  
Comprehensive Mix –  
Submix 9D

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

#### Forensic Toxicology Comprehensive Mix – Submix 9A

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

#### Forensic Toxicology Comprehensive Mix – Submix 9B

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

#### Forensic Toxicology Comprehensive Mix – Submix 9C

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

#### Forensic Toxicology Comprehensive Mix – Submix 9D




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

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>	: Forensic Toxicology Comprehensive Mix – Submix 9A	 
	Forensic Toxicology Comprehensive Mix – Submix 9B	 
	Forensic Toxicology Comprehensive Mix – Submix 9C	 
	Forensic Toxicology Comprehensive Mix – Submix 9D	 
<b>Signal word</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Danger
	Forensic Toxicology Comprehensive Mix – Submix 9B	Danger
	Forensic Toxicology Comprehensive Mix – Submix 9C	Danger
	Forensic Toxicology Comprehensive Mix – Submix 9D	Danger
<b>Hazard statements</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	H225 - Highly flammable liquid and vapour.  H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9B	H225 - Highly flammable liquid and vapour.  H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9C	H225 - Highly flammable liquid and vapour.  H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9D	H225 - Highly flammable liquid and vapour.  H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H319 - Causes serious eye irritation.

### Precautionary statements

## SECTION 2: Hazards identification

<b>Prevention</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
	Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	Forensic Toxicology Comprehensive Mix – Submix 9D	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.
	Forensic Toxicology Comprehensive Mix – Submix 9D	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>Response</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Forensic Toxicology Comprehensive Mix – Submix 9B	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Forensic Toxicology Comprehensive Mix – Submix 9C	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Forensic Toxicology Comprehensive Mix – Submix 9D	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Forensic Toxicology Comprehensive Mix – Submix 9D	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
<b>Storage</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.
<b>Disposal</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Forensic Toxicology Comprehensive Mix – Submix 9B	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Forensic Toxicology Comprehensive Mix – Submix 9C	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## SECTION 2: Hazards identification

	Forensic Toxicology Comprehensive Mix – Submix 9D	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	- acetonitrile
	Forensic Toxicology Comprehensive Mix – Submix 9B	- acetonitrile
	Forensic Toxicology Comprehensive Mix – Submix 9C	- acetonitrile
	Forensic Toxicology Comprehensive Mix – Submix 9D	- acetonitrile
<b>Supplemental label elements</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.

### 2.3 Other hazards

**Forensic Toxicology Comprehensive Mix - Submix 9, Part Number 5190-0564**

**SECTION 2: Hazards identification**

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

Forensic Toxicology Comprehensive Mix – Submix 9A	None known.
Forensic Toxicology Comprehensive Mix – Submix 9B	None known.
Forensic Toxicology Comprehensive Mix – Submix 9C	None known.
Forensic Toxicology Comprehensive Mix – Submix 9D	None known.

**SECTION 3: Composition/information on ingredients**

**3.1 Substances** :

Forensic Toxicology Comprehensive Mix – Submix 9A	Mixture
Forensic Toxicology Comprehensive Mix – Submix 9B	Mixture
Forensic Toxicology Comprehensive Mix – Submix 9C	Mixture
Forensic Toxicology Comprehensive Mix – Submix 9D	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</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>Forensic Toxicology Comprehensive Mix – Submix 9B</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>Forensic Toxicology Comprehensive Mix – Submix 9C</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>Forensic Toxicology Comprehensive Mix – Submix 9D</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  <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

## SECTION 3: Composition/information on ingredients

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

- : Forensic Toxicology Comprehensive Mix – Submix 9A  
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.
- Forensic Toxicology Comprehensive Mix – Submix 9B  
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.
- Forensic Toxicology Comprehensive Mix – Submix 9C  
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.
- Forensic Toxicology Comprehensive Mix – Submix 9D  
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

- : Forensic Toxicology Comprehensive Mix – Submix 9A  
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.
- Forensic Toxicology Comprehensive Mix – Submix 9B  
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.

## SECTION 4: First aid measures

Forensic Toxicology  
Comprehensive Mix –  
Submix 9C

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

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

### Skin contact

: Forensic Toxicology  
Comprehensive Mix –  
Submix 9A

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9B

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9C

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

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.



## SECTION 4: First aid measures

### Ingestion

: Forensic Toxicology  
Comprehensive Mix –  
Submix 9A

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9B

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9C

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

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.

## SECTION 4: First aid measures

<b>Protection of first-aiders</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	Forensic Toxicology Comprehensive Mix – Submix 9D	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>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Causes serious eye irritation.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Causes serious eye irritation.
<b>Inhalation</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful if inhaled.

## SECTION 4: First aid measures

<b>Skin contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful in contact with skin.
<b>Ingestion</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful if swallowed.
<b><u>Over-exposure signs/symptoms</u></b>		
<b>Eye contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Adverse symptoms may include the following:  pain or irritation watering redness
<b>Inhalation</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.

## SECTION 4: First aid measures

<b>Skin contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.
<b>Ingestion</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.

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

<b>Notes to physician</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	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>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific treatment.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific treatment.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific treatment.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

## SECTION 5: Firefighting measures

<b>Suitable extinguishing media</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Do not use water jet.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Do not use water jet.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Do not use water jet.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Do not use water jet.

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

<b>Hazards from the substance or mixture</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	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.

## SECTION 5: Firefighting measures

<b>Hazardous combustion products</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides cyanides

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
<b>Special protective equipment for fire-fighters</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	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)

## SECTION 5: Firefighting measures

Forensic Toxicology  
Comprehensive Mix –  
Submix 9C

conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. 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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

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

: Forensic Toxicology  
Comprehensive Mix –  
Submix 9A

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9B

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9C

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.

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

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.

#### For emergency responders

: Forensic Toxicology  
Comprehensive Mix –  
Submix 9A

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".

Forensic Toxicology  
Comprehensive Mix –  
Submix 9B

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

Forensic Toxicology Comprehensive Mix – Submix 9C	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".
Forensic Toxicology Comprehensive Mix – Submix 9D	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".

### 6.2 Environmental precautions

: Forensic Toxicology Comprehensive Mix – Submix 9A	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).
Forensic Toxicology Comprehensive Mix – Submix 9B	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).
Forensic Toxicology Comprehensive Mix – Submix 9C	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).
Forensic Toxicology Comprehensive Mix – Submix 9D	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

#### Methods for cleaning up

: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
Forensic Toxicology Comprehensive Mix – Submix 9B	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.
Forensic Toxicology Comprehensive Mix – Submix 9C	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.
Forensic Toxicology Comprehensive Mix – Submix 9D	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.
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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

## SECTION 7: Handling and storage

### Advice on general occupational hygiene

Forensic Toxicology Comprehensive Mix – Submix 9A	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.
Forensic Toxicology Comprehensive Mix – Submix 9B	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.
Forensic Toxicology Comprehensive Mix – Submix 9C	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.
Forensic Toxicology Comprehensive Mix – Submix 9D	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.

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

#### Storage

Forensic Toxicology Comprehensive Mix – Submix 9A	Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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.
Forensic Toxicology Comprehensive Mix – Submix 9B	Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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.
Forensic Toxicology Comprehensive Mix – Submix 9C	Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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.

## SECTION 7: Handling and storage

Forensic Toxicology  
Comprehensive Mix –  
Submix 9D

upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.  
Store between the following temperatures: 18 to 25°C (64.4 to 77°F). 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

Category	Notification and MAPP threshold	Safety report threshold
Forensic Toxicology Comprehensive Mix – Submix 9A P5c	5000	50000
Forensic Toxicology Comprehensive Mix – Submix 9B P5c	5000	50000
Forensic Toxicology Comprehensive Mix – Submix 9C P5c	5000	50000
Forensic Toxicology Comprehensive Mix – Submix 9D P5c	5000	50000

### 7.3 Specific end use(s)

#### Recommendations

- : Forensic Toxicology Comprehensive Mix – Submix 9A Industrial applications, Professional applications.
- : Forensic Toxicology Comprehensive Mix – Submix 9B Industrial applications, Professional applications.
- : Forensic Toxicology Comprehensive Mix – Submix 9C Industrial applications, Professional applications.
- : Forensic Toxicology Comprehensive Mix – Submix 9D Industrial applications, Professional applications.

#### Industrial sector specific solutions

- : Forensic Toxicology Comprehensive Mix – Submix 9A Not applicable.
- : Forensic Toxicology Comprehensive Mix – Submix 9B Not applicable.
- : Forensic Toxicology Comprehensive Mix – Submix 9C Not applicable.
- : Forensic Toxicology Comprehensive Mix – Submix 9D Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</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>Forensic Toxicology Comprehensive Mix – Submix 9B</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>Forensic Toxicology Comprehensive Mix – Submix 9C</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>Forensic Toxicology Comprehensive Mix – Submix 9D</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.

#### 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

## SECTION 8: Exposure controls/personal protection

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, 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.

**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

<b>Physical state</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Liquid.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Liquid.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Liquid.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Liquid.

## SECTION 9: Physical and chemical properties

<b>Colour</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.
<b>Odour</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.
<b>Odour threshold</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.
<b>pH</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.
<b>Melting point/freezing point</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	-98°C
	: Forensic Toxicology Comprehensive Mix – Submix 9B	-98°C
	: Forensic Toxicology Comprehensive Mix – Submix 9C	-98°C
	: Forensic Toxicology Comprehensive Mix – Submix 9D	-98°C

## SECTION 9: Physical and chemical properties

<b>Initial boiling point and boiling range</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	65°C
	: Forensic Toxicology Comprehensive Mix – Submix 9B	65°C
	: Forensic Toxicology Comprehensive Mix – Submix 9C	65°C
	: Forensic Toxicology Comprehensive Mix – Submix 9D	65°C
<b>Flash point</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Closed cup: 12°C
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Open cup: 15.85°C Closed cup: 12°C
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Open cup: 15.85°C Closed cup: 12°C
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Open cup: 15.85°C Closed cup: 12°C
	: Forensic Toxicology Comprehensive Mix – Submix 9A	Open cup: 15.85°C
	: Forensic Toxicology Comprehensive Mix – Submix 9B	2.1 (butyl acetate = 1)
	: Forensic Toxicology Comprehensive Mix – Submix 9C	2.1 (butyl acetate = 1)
	: Forensic Toxicology Comprehensive Mix – Submix 9D	2.1 (butyl acetate = 1)
<b>Flammability (solid, gas)</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Lower: 5.5%
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Upper: 44% Lower: 5.5%
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Upper: 44%

## SECTION 9: Physical and chemical properties

	Forensic Toxicology Comprehensive Mix – Submix 9C	Lower: 5.5%
	Forensic Toxicology Comprehensive Mix – Submix 9D	Upper: 44% Lower: 5.5%
	Forensic Toxicology Comprehensive Mix – Submix 9C	Upper: 44%
<b>Vapour pressure</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	12.3 kPa [room temperature]
	Forensic Toxicology Comprehensive Mix – Submix 9B	12.3 kPa [room temperature]
	Forensic Toxicology Comprehensive Mix – Submix 9C	12.3 kPa [room temperature]
	Forensic Toxicology Comprehensive Mix – Submix 9D	12.3 kPa [room temperature]
<b>Vapour density</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	1.1 [Air = 1]
	Forensic Toxicology Comprehensive Mix – Submix 9B	1.1 [Air = 1]
	Forensic Toxicology Comprehensive Mix – Submix 9C	1.1 [Air = 1]
	Forensic Toxicology Comprehensive Mix – Submix 9D	1.1 [Air = 1]
<b>Relative density</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	0.79
	Forensic Toxicology Comprehensive Mix – Submix 9B	0.79
	Forensic Toxicology Comprehensive Mix – Submix 9C	0.79
	Forensic Toxicology Comprehensive Mix – Submix 9D	0.79
<b>Solubility(ies)</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Easily soluble in the following materials: cold water, hot water, methanol, n-octanol and acetone.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Easily soluble in the following materials: cold water, hot water, methanol, n-octanol and acetone.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Easily soluble in the following materials: cold water, hot water, methanol, n-octanol and acetone.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Easily soluble in the following materials: cold water, hot water, methanol, n-octanol and acetone.



## SECTION 9: Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	-0.77
	: Forensic Toxicology Comprehensive Mix – Submix 9B	-0.77
	: Forensic Toxicology Comprehensive Mix – Submix 9C	-0.77
	: Forensic Toxicology Comprehensive Mix – Submix 9D	-0.77
<b>Auto-ignition temperature</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	464°C
	: Forensic Toxicology Comprehensive Mix – Submix 9B	464°C
	: Forensic Toxicology Comprehensive Mix – Submix 9C	464°C
	: Forensic Toxicology Comprehensive Mix – Submix 9D	464°C
<b>Decomposition temperature</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.
<b>Viscosity</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Dynamic (room temperature): 0.614 mPa·s
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Dynamic (room temperature): 0.614 mPa·s
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Dynamic (room temperature): 0.614 mPa·s
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Dynamic (room temperature): 0.614 mPa·s
<b>Explosive properties</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.

## SECTION 9: Physical and chemical properties

<b>Oxidising properties</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Not available.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not available.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not available.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific test data related to reactivity available for this product or its ingredients.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No specific test data related to reactivity available for this product or its ingredients.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No specific test data related to reactivity available for this product or its ingredients.
	Forensic Toxicology Comprehensive Mix – Submix 9D	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	The product is stable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	The product is stable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	The product is stable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Under normal conditions of storage and use, hazardous reactions will not occur.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Under normal conditions of storage and use, hazardous reactions will not occur.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Under normal conditions of storage and use, hazardous reactions will not occur.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Under normal conditions of storage and use, hazardous reactions will not occur.

## SECTION 10: Stability and reactivity

<b>10.4 Conditions to avoid</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	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.
	Forensic Toxicology Comprehensive Mix – Submix 9B	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.
	Forensic Toxicology Comprehensive Mix – Submix 9C	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.
	Forensic Toxicology Comprehensive Mix – Submix 9D	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>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Reactive or incompatible with the following materials:  oxidizing materials
	Forensic Toxicology Comprehensive Mix – Submix 9B	Reactive or incompatible with the following materials:  oxidizing materials
	Forensic Toxicology Comprehensive Mix – Submix 9C	Reactive or incompatible with the following materials:  oxidizing materials
	Forensic Toxicology Comprehensive Mix – Submix 9D	Reactive or incompatible with the following materials:  oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Forensic Toxicology Comprehensive Mix – Submix 9D	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
Forensic Toxicology Comprehensive Mix – Submix 9A Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
Forensic Toxicology Comprehensive Mix –				

## SECTION 11: Toxicological information

<b>Submix 9B</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -
<b>Forensic Toxicology Comprehensive Mix – Submix 9D</b> Acetonitrile	LC50 Inhalation Vapour LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -

### Acute toxicity estimates

Route	ATE value
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</b> Oral Dermal Inhalation (vapours)	571.1 mg/kg 1256.5 mg/kg 12.57 mg/l
<b>Forensic Toxicology Comprehensive Mix – Submix 9B</b> Oral Dermal Inhalation (vapours)	571.1 mg/kg 1256.4 mg/kg 12.56 mg/l
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Oral Dermal Inhalation (vapours)	571.1 mg/kg 1256.5 mg/kg 12.57 mg/l
<b>Forensic Toxicology Comprehensive Mix – Submix 9D</b> Oral Dermal Inhalation (vapours)	570.7 mg/kg 1255.4 mg/kg 12.55 mg/l

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
<b>Forensic Toxicology Comprehensive Mix – Submix 9B</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-

## SECTION 11: Toxicological information

Forensic Toxicology Comprehensive Mix – Submix 9D Acetonitrile	Skin - Mild irritant	Rabbit	-	microliters 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

### Sensitiser

**Conclusion/Summary** : Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

Forensic Toxicology Comprehensive Mix – Submix 9A	Routes of entry anticipated: Oral, Dermal, Inhalation.
Forensic Toxicology Comprehensive Mix – Submix 9B	Routes of entry anticipated: Oral, Dermal, Inhalation.
Forensic Toxicology Comprehensive Mix – Submix 9C	Routes of entry anticipated: Oral, Dermal, Inhalation.
Forensic Toxicology Comprehensive Mix – Submix 9D	Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

<b>Inhalation</b>	Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful if inhaled.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful if inhaled.

## SECTION 11: Toxicological information

<b>Ingestion</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful if swallowed.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful if swallowed.
<b>Skin contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Harmful in contact with skin.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Harmful in contact with skin.
<b>Eye contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Causes serious eye irritation.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Causes serious eye irritation.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Causes serious eye irritation.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	Causes serious eye irritation.

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

<b>Inhalation</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.
<b>Ingestion</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.

## SECTION 11: Toxicological information

<b>Skin contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No specific data.
	: Forensic Toxicology Comprehensive Mix – Submix 9D	No specific data.
<b>Eye contact</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9B	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9C	Adverse symptoms may include the following:  pain or irritation watering redness
	: Forensic Toxicology Comprehensive Mix – Submix 9D	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

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	: Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	: Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	: Forensic Toxicology	No known significant effects or critical hazards.

## SECTION 11: Toxicological information

	Comprehensive Mix – Submix 9D	
<b>Carcinogenicity</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9D	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9D	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9D	No known significant effects or critical hazards.
<b>Developmental effects</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9D	No known significant effects or critical hazards.
<b>Fertility effects</b>	: Forensic Toxicology Comprehensive Mix – Submix 9A	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9B	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix – Submix 9C	No known significant effects or critical hazards.
	Forensic Toxicology Comprehensive Mix –	No known significant effects or critical hazards.



## SECTION 11: Toxicological information

<b>Other information</b>	Submix 9D : Forensic Toxicology Comprehensive Mix – Submix 9A  Forensic Toxicology Comprehensive Mix – Submix 9B  Forensic Toxicology Comprehensive Mix – Submix 9C  Forensic Toxicology Comprehensive Mix – Submix 9D	Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.  Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.  Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.  Adverse symptoms may include the following: May cause headache, weakness, dizziness, shortness of breath, cyanosis, rapid heart beat, unconsciousness and possible death.
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## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
<b>Forensic Toxicology Comprehensive Mix – Submix 9B</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
<b>Forensic Toxicology Comprehensive Mix – Submix 9D</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

## SECTION 12: Ecological information

### 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</b> Acetonitrile	-	-	Readily
<b>Forensic Toxicology Comprehensive Mix – Submix 9B</b> Acetonitrile	-	-	Readily
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Acetonitrile	-	-	Readily
<b>Forensic Toxicology Comprehensive Mix – Submix 9D</b> Acetonitrile	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Forensic Toxicology Comprehensive Mix – Submix 9A</b> Forensic Toxicology Comprehensive Mix – Submix 9A	-0.77	-	low
Acetonitrile	-0.34	3	low
<b>Forensic Toxicology Comprehensive Mix – Submix 9B</b> Forensic Toxicology Comprehensive Mix – Submix 9B	-0.77	-	low
Acetonitrile	-0.34	3	low
<b>Forensic Toxicology Comprehensive Mix – Submix 9C</b> Forensic Toxicology Comprehensive Mix – Submix 9C	-0.77	-	low
Acetonitrile	-0.34	3	low
<b>Forensic Toxicology Comprehensive Mix – Submix 9D</b> Forensic Toxicology Comprehensive Mix – Submix 9D	-0.77	-	low
Acetonitrile	-0.34	3	low

## SECTION 12: Ecological information

### 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 : Not regulated.

#### Additional information

Remarks: De minimis quantities

**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.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	Forensic Toxicology Comprehensive Mix – Submix 9A	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9B	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9C	Not applicable.
	Forensic Toxicology Comprehensive Mix – Submix 9D	Not applicable.

##### Other EU regulations

**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
Forensic Toxicology Comprehensive Mix – Submix 9A P5c
Forensic Toxicology Comprehensive Mix – Submix 9B P5c
Forensic Toxicology Comprehensive Mix – Submix 9C P5c
Forensic Toxicology Comprehensive Mix – Submix 9D P5c

##### International regulations

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

Not listed.

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

Not listed.

## SECTION 15: Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Europe</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: 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>Forensic Toxicology Comprehensive Mix – Submix 9A</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>Forensic Toxicology Comprehensive Mix – Submix 9B</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

**Date of issue/Date of revision** : 14/08/2018

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**Forensic Toxicology Comprehensive Mix - Submix 9, Part Number 5190-0564**

**SECTION 16: Other information**

**Forensic Toxicology Comprehensive Mix – Submix 9C**

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

**Forensic Toxicology Comprehensive Mix – Submix 9D**

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**

**Forensic Toxicology Comprehensive Mix – Submix 9A**

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.

**Forensic Toxicology Comprehensive Mix – Submix 9B**

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.

**Forensic Toxicology Comprehensive Mix – Submix 9C**

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.

**Forensic Toxicology Comprehensive Mix – Submix 9D**

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]**

**Forensic Toxicology Comprehensive Mix – Submix 9A**

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

**Forensic Toxicology Comprehensive Mix – Submix 9B**

Acute Tox. 4, H302  
Acute Tox. 4, H312  
Acute Tox. 4, H332

ACUTE TOXICITY (oral) - Category 4  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4

**Forensic Toxicology Comprehensive Mix - Submix 9, Part Number 5190-0564**

**SECTION 16: Other information**

Eye Irrit. 2, H319  
Flam. Liq. 2, H225

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
FLAMMABLE LIQUIDS - Category 2

**Forensic Toxicology Comprehensive Mix – Submix 9C**

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

**Forensic Toxicology Comprehensive Mix – Submix 9D**

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

**Date of issue/ Date of revision** : 14/08/2018

**Date of previous issue** : 28/06/2018

**Version** : 2.01

**Notice to reader**

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