



## Section 2. Hazards identification

### 19F S/N

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
H340	GERM CELL MUTAGENICITY - Category 1B
H350	CARCINOGENICITY - Category 1A
H335 and H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
H304	ASPIRATION HAZARD - Category 1

### 15N S/N

H227	FLAMMABLE LIQUIDS - Category 4
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
H360	TOXIC TO REPRODUCTION (Unborn child) - Category 1B
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### 31P Sensitivity - TPP

H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
H351	CARCINOGENICITY - Category 2
H335 and H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### 13C S/N

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
H351	CARCINOGENICITY - Category 2
H335 and H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

## 2.2 GHS label elements

### Hazard pictograms



### Signal word

:	19F S/N	Danger
	15N S/N	Danger
	31P Sensitivity - TPP	Warning
	13C S/N	Danger

### Hazard statements

:	19F S/N	H225 - Highly flammable liquid and vapor. H302 - Harmful if swallowed. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H340 - May cause genetic defects. H350 - May cause cancer. H304 - May be fatal if swallowed and enters airways. H335 - May cause respiratory irritation. H336 - May cause drowsiness and dizziness.
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15N S/N	H372 - Causes damage to organs through prolonged or repeated exposure. H227 - Combustible liquid. H319 - Causes serious eye irritation. H360 - May damage the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure.
31P Sensitivity - TPP	H302 - Harmful if swallowed. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H351 - Suspected of causing cancer. H335 - May cause respiratory irritation. H336 - May cause drowsiness and dizziness. H373 - May cause damage to organs through prolonged or repeated exposure.
13C S/N	H225 - Highly flammable liquid and vapor. H302 - Harmful if swallowed. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H351 - Suspected of causing cancer. H335 - May cause respiratory irritation. H336 - May cause drowsiness and dizziness. H373 - May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

#### General

: 19F S/N	Not applicable.
15N S/N	Not applicable.
31P Sensitivity - TPP	Not applicable.
13C S/N	Not applicable.

#### Prevention

: 19F S/N	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product.
15N S/N	P264 - Wash hands thoroughly after handling. P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection.

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13C S/N

**Response**

: 19F S/N

P210 - Keep away from flames and hot surfaces. - No smoking.  
 P260 - Do not breathe vapor.  
 P264 - Wash hands thoroughly after handling.  
 P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P281 - Use personal protective equipment as required.  
 P280 - Wear protective gloves. Wear eye or face protection.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P281 - Use personal protective equipment as required.  
 P280 - Wear protective gloves. Wear eye or face protection.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P233 - Keep container tightly closed.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P260 - Do not breathe vapor.  
 P270 - Do not eat, drink or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P314 - Get medical attention if you feel unwell.  
 P308 + P313 - IF exposed or concerned: Get medical attention.  
 P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
 P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P302 + P352 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.  
 P332 + P313 - If skin irritation occurs: Get medical attention.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

## Section 2. Hazards identification

15N S/N	<p>Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical attention.</p> <p>P314 - Get medical attention if you feel unwell.</p> <p>P308 + P313 - IF exposed or concerned: Get medical attention.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical attention.</p>
31P Sensitivity - TPP	<p>P314 - Get medical attention if you feel unwell.</p> <p>P308 + P313 - IF exposed or concerned: Get medical attention.</p> <p>P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.</p> <p>P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</p> <p>P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.</p> <p>P332 + P313 - If skin irritation occurs: Get medical attention.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical attention.</p>
13C S/N	<p>P314 - Get medical attention if you feel unwell.</p> <p>P308 + P313 - IF exposed or concerned: Get medical attention.</p> <p>P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.</p> <p>P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</p> <p>P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P302 + P352 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.</p> <p>P332 + P313 - If skin irritation occurs: Get medical attention.</p> <p>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 - If eye irritation persists: Get medical attention.</p>

## Section 2. Hazards identification

<b>Storage</b>	: 19F S/N	P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
	15N S/N	P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
	31P Sensitivity - TPP 13C S/N	P405 - Store locked up. P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
<b>Disposal</b>	: 19F S/N	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	15N S/N	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	31P Sensitivity - TPP	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	13C S/N	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	: Avoid contact with skin and clothing.	Wash thoroughly after handling.

### 2.3 Other hazards

<b>Hazards not otherwise classified</b>	: 19F S/N	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
	15N S/N	None known.
	31P Sensitivity - TPP	None known.
	13C S/N	Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

<b>Substance/mixture</b>	: 19F S/N	Mixture (encapsulated in article)
	15N S/N	Mixture (encapsulated in article)
	31P Sensitivity - TPP	Mixture (encapsulated in article)
	13C S/N	Mixture (encapsulated in article)

Ingredient name	%	CAS number
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	60 - 100	1076-43-3
<b>15N S/N</b> Formamide di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	60 - 100 5 - 10	75-12-7 2206-27-1
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	60 - 100	865-49-6
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	60 - 100	865-49-6

## Section 3. Composition/information on ingredients

Ethylbenzene	5 - 10	100-41-4
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Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

<p><b>Eye contact</b></p>	<p>: 19F S/N</p>	<p>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</p>
	<p>15N S/N</p>	<p>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</p>
	<p>31P Sensitivity - TPP</p>	<p>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</p>
	<p>13C S/N</p>	<p>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</p>
<p><b>Inhalation</b></p>	<p>: 19F S/N</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 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.</p>
	<p>15N S/N</p>	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 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</p>

## Section 4. First aid measures

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 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.

31P Sensitivity - TPP

13C S/N

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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

: 19F S/N

Wash skin thoroughly with soap and water or use recognized skin cleanser. 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

15N S/N

Flush contaminated skin with plenty of 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

31P Sensitivity - TPP

13C S/N

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated

## Section 4. First aid measures

### Ingestion

: 19F S/N

clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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. 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.

15N S/N

31P Sensitivity - TPP

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.

13C S/N

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

## Section 4. First aid measures

does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

<b>Eye contact</b>	: 19F S/N	Causes serious eye irritation.
	15N S/N	Causes serious eye irritation.
	31P Sensitivity - TPP	Causes serious eye irritation.
	13C S/N	Causes serious eye irritation.
<b>Inhalation</b>	: 19F S/N	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
	15N S/N	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	31P Sensitivity - TPP	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	13C S/N	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin contact</b>	: 19F S/N	Causes skin irritation. Defatting to the skin.
	15N S/N	No known significant effects or critical hazards.
	31P Sensitivity - TPP	Causes skin irritation.
	13C S/N	Causes skin irritation. Defatting to the skin.
<b>Ingestion</b>	: 19F S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
	15N S/N	Irritating to mouth, throat and stomach.
	31P Sensitivity - TPP	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	13C S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: 19F S/N	Adverse symptoms may include the following: pain or irritation watering redness
	15N S/N	Adverse symptoms may include the following: pain or irritation watering redness
	31P Sensitivity - TPP	Adverse symptoms may include the following: pain or irritation watering

## Section 4. First aid measures

	13C S/N	redness Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: 19F S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	13C S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: 19F S/N	Adverse symptoms may include the following: irritation redness dryness cracking
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	Adverse symptoms may include the following: irritation redness
	13C S/N	Adverse symptoms may include the following: irritation redness dryness cracking
<b>Ingestion</b>	: 19F S/N	Adverse symptoms may include the following: nausea or vomiting
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	No specific data.
	13C S/N	No specific data.

## Section 4. First aid measures

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

<b>Notes to physician</b>	: 19F S/N	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	15N S/N	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.
	31P Sensitivity - TPP	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.
	13C S/N	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>	: 19F S/N	No specific treatment.
	15N S/N	No specific treatment.
	31P Sensitivity - TPP	No specific treatment.
	13C S/N	No specific treatment.
<b>Protection of first-aiders</b>	: 19F S/N	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.
	15N S/N	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.
	31P Sensitivity - TPP	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.
	13C S/N	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: 19F S/N	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	15N S/N	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	31P Sensitivity - TPP	Use an extinguishing agent suitable for the surrounding fire.
	13C S/N	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: 19F S/N	Do not use water jet.
	15N S/N	Do not use water jet.
	31P Sensitivity - TPP	None known.
	13C S/N	Do not use water jet.

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

<b>Specific hazards arising from the chemical</b>	: 19F S/N	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
	15N S/N	Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
	31P Sensitivity - TPP	In a fire or if heated, a pressure increase will occur and the container may burst.
	13C S/N	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
<b>Hazardous thermal decomposition products</b>	: 19F S/N	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	15N S/N	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides
	31P Sensitivity - TPP	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides
	13C S/N	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides

### 5.3 Advice for firefighters

## Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** : 19F S/N

15N S/N

31P Sensitivity - TPP

13C S/N

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.

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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** : 19F S/N

15N S/N

31P Sensitivity - TPP

13C S/N

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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## Section 6. Accidental release measures

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

**For non-emergency personnel** : 19F S/N

15N S/N

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist.

Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist.

## Section 6. Accidental release measures

		Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	31P Sensitivity - TPP	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	13C S/N	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".
<b>For emergency responders :</b>	19F S/N	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".
	15N S/N	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".
	31P Sensitivity - TPP	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".
	13C S/N	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".
<b>6.2 Environmental precautions :</b>	19F S/N	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	15N S/N	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	31P Sensitivity - TPP	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	13C S/N	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

## Section 6. Accidental release measures

waterways, soil or air).

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

19F S/N	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.
15N S/N	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.
31P Sensitivity - TPP	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.
13C S/N	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

**Protective measures** : 19F S/N

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. 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.

15N S/N

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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

## Section 7. Handling and storage

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

31P Sensitivity - TPP

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

13C S/N

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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

- : 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

: 19F S/N

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened

## Section 7. Handling and storage

15N S/N

must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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

31P Sensitivity - TPP

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. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

13C S/N

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

### 7.3 Specific end use(s)

#### Recommendations

: 19F S/N  
 15N S/N  
 31P Sensitivity - TPP  
 13C S/N

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

#### Industrial sector specific solutions

: Not applicable.

## Section 8. Exposure controls/personal protection

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<p><b>19F S/N</b> (<sup>2</sup>H<sub>6</sub>)Benzene</p>	<p><b>ACGIH TLV (United States, 6/2013).</b> <b>Absorbed through skin.</b> TWA: 0.5 ppm 8 hours. TWA: 1.6 mg/m<sup>3</sup> 8 hours. STEL: 2.5 ppm 15 minutes. STEL: 8 mg/m<sup>3</sup> 15 minutes.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 ppm 8 hours. STEL: 5 ppm 15 minutes.</p> <p><b>OSHA PEL Z2 (United States, 2/2013).</b> TWA: 10 ppm 8 hours. CEIL: 25 ppm AMP: 50 ppm 10 minutes.</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 0.1 ppm 10 hours. STEL: 1 ppm 15 minutes.</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 1 ppm 8 hours. STEL: 5 ppm 15 minutes.</p>
<p><b>15N S/N</b> Formamide</p>	<p><b>ACGIH TLV (United States, 6/2013).</b> <b>Absorbed through skin.</b> TWA: 10 ppm 8 hours. TWA: 18 mg/m<sup>3</sup> 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 20 ppm 8 hours. TWA: 30 mg/m<sup>3</sup> 8 hours. STEL: 30 ppm 15 minutes. STEL: 45 mg/m<sup>3</sup> 15 minutes.</p> <p><b>NIOSH REL (United States, 10/2013).</b> <b>Absorbed through skin.</b> TWA: 10 ppm 10 hours. TWA: 15 mg/m<sup>3</sup> 10 hours.</p> <p><b>AIHA WEEL (United States, 10/2011).</b> TWA: 250 ppm 8 hours.</p>
<p>di[(<sup>2</sup>H<sub>3</sub>)Methyl] sulphoxide</p>	
<p><b>31P Sensitivity - TPP</b> (<sup>2</sup>H)Chloroform</p>	<p><b>ACGIH TLV (United States, 3/2012).</b> TWA: 10 ppm 8 hours. TWA: 49 mg/m<sup>3</sup> 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 2 ppm 8 hours. TWA: 9.78 mg/m<sup>3</sup> 8 hours.</p> <p><b>NIOSH REL (United States, 6/2009).</b> STEL: 2 ppm 60 minutes. STEL: 9.78 mg/m<sup>3</sup> 60 minutes.</p> <p><b>OSHA PEL (United States, 6/2010).</b> CEIL: 50 ppm CEIL: 240 mg/m<sup>3</sup></p>
<p><b>13C S/N</b> (<sup>2</sup>H)Chloroform</p>	<p><b>ACGIH TLV (United States, 3/2012).</b></p>

## Section 8. Exposure controls/personal protection

Ethylbenzene

TWA: 10 ppm 8 hours.  
 TWA: 49 mg/m<sup>3</sup> 8 hours.  
**OSHA PEL 1989 (United States, 3/1989).**  
 TWA: 2 ppm 8 hours.  
 TWA: 9.78 mg/m<sup>3</sup> 8 hours.  
**NIOSH REL (United States, 6/2009).**  
 STEL: 2 ppm 60 minutes.  
 STEL: 9.78 mg/m<sup>3</sup> 60 minutes.  
**OSHA PEL (United States, 6/2010).**  
 CEIL: 50 ppm  
 CEIL: 240 mg/m<sup>3</sup>  
**ACGIH TLV (United States, 6/2013).**  
 TWA: 20 ppm 8 hours.  
**OSHA PEL 1989 (United States, 3/1989).**  
 TWA: 100 ppm 8 hours.  
 TWA: 435 mg/m<sup>3</sup> 8 hours.  
 STEL: 125 ppm 15 minutes.  
 STEL: 545 mg/m<sup>3</sup> 15 minutes.  
**NIOSH REL (United States, 10/2013).**  
 TWA: 100 ppm 10 hours.  
 TWA: 435 mg/m<sup>3</sup> 10 hours.  
 STEL: 125 ppm 15 minutes.  
 STEL: 545 mg/m<sup>3</sup> 15 minutes.  
**OSHA PEL (United States, 2/2013).**  
 TWA: 100 ppm 8 hours.  
 TWA: 435 mg/m<sup>3</sup> 8 hours.

### 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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### **Skin protection**

## Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: 19F S/N	Liquid.
	15N S/N	Liquid.
	31P Sensitivity - TPP	Liquid.
	13C S/N	Liquid.
<b>Color</b>	: 19F S/N	Not available.
	15N S/N	Not available.
	31P Sensitivity - TPP	Not available.
	13C S/N	Colorless.
<b>Odor</b>	: 19F S/N	Not available.
	15N S/N	Not available.
	31P Sensitivity - TPP	Not available.
	13C S/N	Pleasant. / Sweet.
<b>Odor threshold</b>	: 19F S/N	Not available.
	15N S/N	Not available.
	31P Sensitivity - TPP	Not available.
	13C S/N	Not available.
<b>pH</b>	: 19F S/N	Not available.
	15N S/N	Not available.
	31P Sensitivity - TPP	Not available.
	13C S/N	Not available.
<b>Melting point</b>	: 19F S/N	5°C (41°F)
	15N S/N	Not available.
	31P Sensitivity - TPP	-64°C (-83.2°F)
	13C S/N	-64°C (-83.2°F)
<b>Boiling point</b>	: 19F S/N	80°C (176°F)
	15N S/N	Not available.
	31P Sensitivity - TPP	62°C (143.6°F)
	13C S/N	60.9°C (141.6°F)
<b>Flash point</b>	: 19F S/N	Closed cup: -11.11°C (12°F)
	15N S/N	Closed cup: 87.8°C (190°F)
	31P Sensitivity - TPP	Not available.
	13C S/N	Closed cup: 15°C (59°F) [(Ethylbenzene)]

## Section 9. Physical and chemical properties

<b>Evaporation rate</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Vapor pressure</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Vapor density</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Relative density</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. 1.5
<b>Solubility</b>	: 19F S/N  15N S/N  31P Sensitivity - TPP  13C S/N	Insoluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water. Very slightly soluble in the following materials: cold water and hot water. Very slightly soluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: Not available.	
<b>Partition coefficient: n-octanol/water</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
<b>Viscosity</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	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>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	The product is stable. The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	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.
<b>10.4 Conditions to avoid</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. No specific data. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
<b>10.5 Incompatible materials</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: oxidizing materials No specific data. Reactive or incompatible with the following materials: oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be

## Section 10. Stability and reactivity

13C S/N

produced.  
Under normal conditions of storage and use,  
hazardous decomposition products should not be  
produced.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	LD50 Oral	Rat	930 mg/kg	-
<b>15N S/N</b> Formamide	LD50 Dermal LD50 Oral	Rabbit Rat	17 g/kg 4000 mg/kg	- -
di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rat Rabbit Rat	47702 mg/m <sup>3</sup> >20 g/kg 300 mg/kg	4 hours - -
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	LC50 Inhalation Vapor LD50 Dermal LD50 Oral	Rat Rabbit Rat	47702 mg/m <sup>3</sup> >20 g/kg 300 mg/kg	4 hours - -
Ethylbenzene	LC50 Inhalation Gas. LD50 Dermal LD50 Oral	Rat Rabbit Rat	4000 ppm >5000 mg/kg 3500 mg/kg	4 hours - -

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Eyes - Moderate irritant Eyes - Severe irritant	Rabbit Rabbit	- -	88 milligrams 24 hours 2	- -
	Skin - Mild irritant	Rat	-	milligrams 8 hours 60	-
	Skin - Mild irritant	Rabbit	-	microliters 24 hours 15	-
	Skin - Moderate irritant	Rabbit	-	milligrams 24 hours 20	-
	milligrams				
<b>15N S/N</b> Formamide	Eyes - Severe irritant	Rabbit	-	100	-
di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	Eyes - Mild irritant	Rabbit	-	milligrams 24 hours 500	-
	Eyes - Mild irritant	Rabbit	-	milligrams 100	-
	Skin - Mild irritant	Rabbit	-	milligrams 24 hours 500	-
	Skin - Mild irritant	Rabbit	-	milligrams 100	-
	milligrams				
<b>31P Sensitivity - TPP</b>					

## Section 11. Toxicological information

(2H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>13C S/N</b> (2H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Ethylbenzene	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
<b>19F S/N</b> (2H6)Benzene	+	1	Known to be a human carcinogen.
<b>31P Sensitivity - TPP</b> (2H)Chloroform	-	2B	Reasonably anticipated to be a human carcinogen.
<b>13C S/N</b> (2H)Chloroform Ethylbenzene	-	2B	Reasonably anticipated to be a human carcinogen.
	-	2B	-

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>19F S/N</b> (2H6)Benzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
<b>31P Sensitivity - TPP</b> (2H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
<b>13C S/N</b> (2H)Chloroform Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
	Category 3	Not applicable.	Respiratory tract

**Section 11. Toxicological information**irritation and  
Narcotic effects**Specific target organ toxicity (repeated exposure)**

Name	Category	Route of exposure	Target organs
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Category 1	Oral Inhalation	blood system blood system
<b>15N S/N</b> di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	Category 2	Oral	kidneys and liver
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	Category 2	Not determined	kidneys and liver
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	Category 2	Not determined	kidneys and liver

**Aspiration hazard**

Name	Result
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	ASPIRATION HAZARD - Category 1
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	ASPIRATION HAZARD - Category 1
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : 19F S/N Not available.  
15N S/N Not available.  
31P Sensitivity - TPP Not available.  
13C S/N Not available.

**Potential acute health effects**

**Eye contact** : 19F S/N Causes serious eye irritation.  
15N S/N Causes serious eye irritation.  
31P Sensitivity - TPP Causes serious eye irritation.  
13C S/N Causes serious eye irritation.

**Inhalation** : 19F S/N Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.  
15N S/N Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
31P Sensitivity - TPP Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
13C S/N Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

## Section 11. Toxicological information

<b>Skin contact</b>	: 19F S/N	Causes skin irritation. Defatting to the skin.
	15N S/N	No known significant effects or critical hazards.
	31P Sensitivity - TPP	Causes skin irritation.
<b>Ingestion</b>	13C S/N	Causes skin irritation. Defatting to the skin.
	: 19F S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
	15N S/N	Irritating to mouth, throat and stomach.
	31P Sensitivity - TPP	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	13C S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

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

<b>Eye contact</b>	: 19F S/N	Adverse symptoms may include the following: pain or irritation watering redness
	15N S/N	Adverse symptoms may include the following: pain or irritation watering redness
	31P Sensitivity - TPP	Adverse symptoms may include the following: pain or irritation watering redness
	13C S/N	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: 19F S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	13C S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache

## Section 11. Toxicological information

		drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: 19F S/N	Adverse symptoms may include the following: irritation redness dryness cracking
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	Adverse symptoms may include the following: irritation redness
	13C S/N	Adverse symptoms may include the following: irritation redness dryness cracking
<b>Ingestion</b>	: 19F S/N	Adverse symptoms may include the following: nausea or vomiting
	15N S/N	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	31P Sensitivity - TPP	No specific data.
	13C S/N	No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	: 19F S/N	Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	15N S/N	May cause damage to organs through prolonged or repeated exposure.
	31P Sensitivity - TPP	May cause damage to organs through prolonged or repeated exposure.
	13C S/N	May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

## Section 11. Toxicological information

<b>Carcinogenicity</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	May cause cancer. Risk of cancer depends on duration and level of exposure. No known significant effects or critical hazards. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	May cause genetic defects. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	No known significant effects or critical hazards. May damage the unborn child. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Developmental effects</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
<b>19F S/N</b> Oral	930.5 mg/kg
<b>15N S/N</b> Oral	4444.4 mg/kg
<b>31P Sensitivity - TPP</b> Oral	500.2 mg/kg
<b>13C S/N</b> Oral	546.9 mg/kg
Inhalation (gases)	40000 ppm

<b>Other information</b>	: 19F S/N 15N S/N 31P Sensitivity - TPP 13C S/N	Not available. Not available. Not available. Not available.
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## Section 12. Ecological information

### 12.1 Toxicity

## Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure	
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Acute EC50 29000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours	
	Acute EC50 1360000 µg/l Fresh water	Algae - Scenedesmus abundans	96 hours	
	Acute EC50 9230 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Acute LC50 21000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours	
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours	
<b>15N S/N</b> di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)	4 weeks	
	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	Acute LC50 34000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours	
	Acute EC50 13.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours	
	Acute LC50 81.5 mg/l Marine water	Crustaceans - Penaeus duorarum	48 hours	
	Acute LC50 29000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours	
	Acute LC50 13300 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours	
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	Chronic EC10 3.61 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours	
	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days	
	Acute EC50 13.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours	
	Acute LC50 81.5 mg/l Marine water	Crustaceans - Penaeus duorarum	48 hours	
	Acute LC50 29000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours	
	Acute LC50 13300 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours	
	Chronic EC10 3.61 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours	
	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days	
	Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
		Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Acute EC50 2970 µg/l Fresh water		Daphnia - Daphnia magna - Neonate	48 hours	
Acute LC50 5200 µg/l Marine water		Crustaceans - Americamysis bahia	48 hours	
Acute LC50 4200 µg/l Fresh water		Fish - Oncorhynchus mykiss	96 hours	
Chronic NOEC 1000 µg/l Fresh water		Algae - Pseudokirchneriella subcapitata	96 hours	

### 12.2 Persistence and degradability

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>13C S/N</b> Ethylbenzene	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	2.13	11	low
<b>15N S/N</b> Formamide	-0.82	-	low
di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	-1.35	3.16	low
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	1.97	690	high
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	1.97	690	high
Ethylbenzene	3.6	-	low

### 12.4 Mobility in soil

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

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**RCRA classification** : 19F S/N Not available.  
15N S/N Not available.  
31P Sensitivity - TPP Not available.  
13C S/N Not available.

**United States - RCRA Toxic hazardous waste "U" List**

## Section 13. Disposal considerations

Ingredient	CAS #	Status	Reference number
<b>19F S/N</b> Benzene (I,T)	1076-43-3	Listed	U019
<b>31P Sensitivity - TPP</b> Chloroform; Methane, trichloro-	865-49-6	Listed	U044
<b>13C S/N</b> Chloroform; Methane, trichloro-	865-49-6	Listed	U044

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

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

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

## Section 14. Transport information

This Material Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

### Regulatory information

**Additional information** : **Remarks**  
De minimis quantities

**DOT / IMDG / IATA** : Not regulated.

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: Formamide  
**United States inventory (TSCA 8b)**: All components are listed or exempted.  
**Clean Water Act (CWA) 307**: (<sup>2</sup>H<sub>6</sub>)Benzene; (<sup>2</sup>H)Chloroform; Ethylbenzene  
**Clean Water Act (CWA) 311**: (<sup>2</sup>H<sub>6</sub>)Benzene; (<sup>2</sup>H)Chloroform; Ethylbenzene

**Clean Air Act (CAA) 112 regulated toxic substances**: (<sup>2</sup>H)Chloroform

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

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

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

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

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

### SARA 302/304

#### Composition/information on ingredients

## Section 15. Regulatory information

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	60 - 100	Yes.	-	-	-	-
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	60 - 100	Yes.	-	-	-	-

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
 Immediate (acute) health hazard  
 Delayed (chronic) health hazard

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	60 - 100	Yes.	No.	No.	Yes.	Yes.
<b>15N S/N</b> Formamide di[( <sup>2</sup> H <sub>3</sub> )Methyl] sulphoxide	60 - 100 5 - 10	No. Yes.	No. No.	No. No.	Yes. Yes.	Yes. Yes.
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	60 - 100	No.	No.	No.	Yes.	Yes.
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform Ethylbenzene	60 - 100 5 - 10	No. Yes.	No. No.	No. No.	Yes. Yes.	Yes. Yes.

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	1076-43-3	60 - 100
	<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	865-49-6	60 - 100
	<b>13C S/N</b> ( <sup>2</sup> H)Chloroform Ethylbenzene	865-49-6 100-41-4	60 - 100 5 - 10
<b>Supplier notification</b>	<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	1076-43-3	60 - 100
	<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	865-49-6	60 - 100
	<b>13C S/N</b> ( <sup>2</sup> H)Chloroform Ethylbenzene	865-49-6 100-41-4	60 - 100 5 - 10

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

## Section 15. Regulatory information

### State regulations

- Massachusetts** : The following components are listed: BENZENE; CHLOROFORM; ETHYL BENZENE; FORMAMIDE
- New York** : The following components are listed: Benzene; Chloroform; Methane, trichloro-; Ethylbenzene
- New Jersey** : The following components are listed: BENZENE; CHLOROFORM; METHANE, TRICHLORO-; ETHYL BENZENE; BENZENE, ETHYL-; DIMETHYL SULFOXIDE; METHANE, SULFINYLBI-; FORMAMIDE
- Pennsylvania** : The following components are listed: BENZENE; METHANE, TRICHLORO-; BENZENE, ETHYL-; di[(<sup>2</sup>H<sub>3</sub>)Methyl] sulphoxide; FORMAMIDE

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
<b>19F S/N</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
<b>31P Sensitivity - TPP</b> ( <sup>2</sup> H)Chloroform	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
<b>13C S/N</b> ( <sup>2</sup> H)Chloroform	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.

**Canada inventory** : At least one component is not listed in DSL but all such components are listed in NDSL.

### International regulations

- International lists** :
- Australia inventory (AICS):** Not determined.
  - China inventory (IECSC):** All components are listed or exempted.
  - Japan inventory:** All components are listed or exempted.
  - Korea inventory:** Not determined.
  - Malaysia Inventory (EHS Register):** Not determined.
  - New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.
  - Philippines inventory (PICCS):** All components are listed or exempted.
  - Taiwan inventory (CSNN):** Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### History

**Date of issue** : 11/10/2014.

**Date of previous issue** : 11/12/2012.

**Version** : 2

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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