

# SAFETY DATA SHEET



Tube/Sample Kit for 1H Nano NMR probe, Part Number 99314200

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

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

### 1.1 Product identifier

**Product name** : Tube/Sample Kit for 1H Nano NMR probe, Part Number 99314200  
**Part No. (Kit)** : 99314200  
**Part No.** : 1H S/N 190636170  
4Hz D2O 190636190  
1H Lineshape 190636199

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

Identified uses	
<input checked="" type="checkbox"/> Reagents and Standards for Analytical Chemistry Laboratory Use	
1H S/N	42 µl
4Hz D2O	42 µl
1H Lineshape	42 µl

### 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

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.

### 2.1 Classification of the substance or mixture

**Product definition** :  1H S/N Mixture (encapsulated in article)  
4Hz D2O Mixture (encapsulated in article)  
1H Lineshape Mixture (encapsulated in article)

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

1H S/N  
H302 ACUTE TOXICITY (oral) - Category 4  
H331 ACUTE TOXICITY (inhalation) - Category 3  
H315 SKIN CORROSION/IRRITATION - Category 2  
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
H351 CARCINOGENICITY - Category 2  
H361d REPRODUCTIVE TOXICITY (Unborn child) - Category 2  
H372 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

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## SECTION 2: Hazards identification

### 1H Lineshape

H225	FLAMMABLE LIQUIDS - Category 2
H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
H351	CARCINOGENICITY - Category 2
H361d	REPRODUCTIVE TOXICITY (Unborn child) - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - 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

#### Hazard pictograms

: 1H S/N



1H Lineshape



#### Signal word

: 1H S/N  
4Hz D2O  
1H Lineshape

Danger  
No signal word.  
Danger

#### Hazard statements

: 1H S/N

H331 - Toxic if inhaled.  
H302 - Harmful if swallowed.  
H319 - Causes serious eye irritation.  
H315 - Causes skin irritation.  
H361d - Suspected of damaging the unborn child.  
H351 - Suspected of causing cancer.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
4Hz D2O  
No known significant effects or critical hazards.  
1H Lineshape  
H225 - Highly flammable liquid and vapour.  
H319 - Causes serious eye irritation.  
H361d - Suspected of damaging the unborn child.  
H351 - Suspected of causing cancer.  
H336 - May cause drowsiness or dizziness.  
H373 - May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

##### Prevention

: 1H S/N

P201 - Obtain special instructions before use.  
P280 - Wear protective gloves. Wear protective clothing.  
Wear eye or face protection.  
P260 - Do not breathe vapour.

4Hz D2O  
1H Lineshape

Not applicable.  
P201 - Obtain special instructions before use.  
P280 - Wear protective gloves. Wear protective clothing.  
Wear eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 - Do not breathe vapour.

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## SECTION 2: Hazards identification

<b>Response</b>	: 1H S/N 4Hz D2O 1H Lineshape	P304 + P340 + P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. Not applicable. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
<b>Storage</b>	: 1H S/N 4Hz D2O 1H Lineshape	P405 - Store locked up. Not applicable. P405 - Store locked up.
<b>Disposal</b>	: 1H S/N 4Hz D2O 1H Lineshape	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: 1H S/N 1H Lineshape	- trichloromethane - acetone - trichloromethane
<b>Supplemental label elements</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not applicable. Not applicable. Repeated exposure may cause skin dryness or cracking.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: 1H S/N 4Hz D2O 1H Lineshape	For use in industrial installations only. Not applicable. For use in industrial installations only.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not applicable. Not applicable. Not applicable.

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	: 1H S/N 4Hz D2O 1H Lineshape	None known. None known. None known.
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## 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>3.1 Substances</b>	: 1H S/N 4Hz D2O 1H Lineshape	Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article)
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Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
1H S/N ( <sup>2</sup> H)Chloroform	EC: 200-663-8 CAS: 865-49-6 Index: 602-006-00-4	≥90	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361d (Unborn child) STOT RE 1, H372	[1] [2]

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### SECTION 3: Composition/information on ingredients

1H Lineshape ( <sup>2</sup> H <sub>6</sub> )Acetone	EC: 211-563-9 CAS: 666-52-4 Index: 606-001-00-8	≥90	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
Trichloromethane	EC: 200-663-8 CAS: 67-66-3 Index: 602-006-00-4	<10	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361d (Unborn child) STOT RE 1, H372  <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

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

<b>Eye contact</b>	: 1H S/N	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.
	4Hz D2O	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	1H Lineshape	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.
<b>Inhalation</b>	: 1H 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.
	4Hz D2O	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	1H Lineshape	Remove victim to fresh air and keep at rest in a position

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## SECTION 4: First aid measures

		<p>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.</p>
<b>Skin contact</b>	: 1H S/N	<p>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.</p>
	4Hz D2O	<p>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</p>
	1H Lineshape	<p>Wash skin thoroughly with soap and water or use recognised skin cleanser. 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.</p>
<b>Ingestion</b>	: 1H S/N	<p>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.</p>
	4Hz D2O	<p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</p>
	1H Lineshape	<p>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.</p>

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## SECTION 4: First aid measures

<b>Protection of first-aiders</b>	: 1H 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.
	4Hz D2O	No action shall be taken involving any personal risk or without suitable training.
	1H Lineshape	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.

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

#### Potential acute health effects

<b>Eye contact</b>	: 1H S/N 4Hz D2O 1H Lineshape	Causes serious eye irritation. No known significant effects or critical hazards. Causes serious eye irritation.
<b>Inhalation</b>	: 1H S/N 4Hz D2O 1H Lineshape	Toxic if inhaled. No known significant effects or critical hazards. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
<b>Skin contact</b>	: 1H S/N 4Hz D2O 1H Lineshape	Causes skin irritation. No known significant effects or critical hazards. Defatting to the skin. May cause skin dryness and irritation.
<b>Ingestion</b>	: 1H S/N 4Hz D2O 1H Lineshape	Harmful if swallowed. No known significant effects or critical hazards. Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: 1H S/N	Adverse symptoms may include the following: pain or irritation watering redness
	4Hz D2O 1H Lineshape	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: 1H S/N	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	4Hz D2O 1H Lineshape	No specific data. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

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## SECTION 4: First aid measures

<b>Skin contact</b>	: 1H S/N	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
	4Hz D2O 1H Lineshape	No specific data. Adverse symptoms may include the following: irritation dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
<b>Ingestion</b>	: 1H S/N	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	4Hz D2O 1H Lineshape	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

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

<b>Notes to physician</b>	: 1H 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.
	4Hz D2O	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	1H Lineshape	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>	: 1H S/N	No specific treatment.
	4Hz D2O	No specific treatment.
	1H Lineshape	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: 1H S/N	Use an extinguishing agent suitable for the surrounding fire.
	4Hz D2O	Use an extinguishing agent suitable for the surrounding fire.
	1H Lineshape	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: 1H S/N	None known.
	4Hz D2O	None known.
	1H Lineshape	Do not use water jet.

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

<b>Hazards from the substance or mixture</b>	: 1H S/N	In a fire or if heated, a pressure increase will occur and the container may burst.
	4Hz D2O	In a fire or if heated, a pressure increase will occur and the container may burst.
	1H Lineshape	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.

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## SECTION 5: Firefighting measures

<b>Hazardous combustion products</b>	: 1H S/N	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides No specific data.
	4Hz D2O	
	1H Lineshape	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: 1H 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.
	4Hz D2O	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.
	1H Lineshape	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>	: 1H 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. 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.
	4Hz D2O	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.
	1H Lineshape	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

<b>For non-emergency personnel</b>	: 1H 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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	4Hz D2O	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	1H Lineshape	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.

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## SECTION 6: Accidental release measures

		Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: 1H 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".
	4Hz D2O	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".
	1H Lineshape	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>	: 1H S/N	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).
	4Hz D2O	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).
	1H Lineshape	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).
<b>6.3 Methods and material for containment and cleaning up</b>		
<b>Methods for cleaning up</b>	: 1H S/N	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.
	4Hz D2O	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.
	1H Lineshape	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.
<b>6.4 Reference to other sections</b>	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.	

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Protective measures** : 1H 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 vapour 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.

4Hz D2O

Put on appropriate personal protective equipment (see Section 8).

1H Lineshape

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 vapour 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** : 1H S/N

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.

4Hz D2O

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.

1H Lineshape

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** : 1H S/N

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

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## SECTION 7: Handling and storage

4Hz D2O

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

1H Lineshape

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

### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
<b>1H S/N</b> H2	50	200
<b>1H Lineshape</b> P5c	5000	50000

### 7.3 Specific end use(s)

<b>Recommendations</b>	: 1H S/N	Industrial applications, Professional applications.
	4Hz D2O	Industrial applications, Professional applications.
	1H Lineshape	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: 1H S/N	Not applicable.
	4Hz D2O	Not applicable.
	1H Lineshape	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

Product/ingredient name	Exposure limit values
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> TWA: 2 ppm 8 hours. TWA: 9.9 mg/m <sup>3</sup> 8 hours.
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b>

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## SECTION 8: Exposure controls/personal protection

Trichloromethane

STEL: 3620 mg/m<sup>3</sup> 15 minutes.

STEL: 1500 ppm 15 minutes.

TWA: 500 ppm 8 hours.

TWA: 1210 mg/m<sup>3</sup> 8 hours.

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

TWA: 2 ppm 8 hours.

TWA: 9.9 mg/m<sup>3</sup> 8 hours.

### Recommended monitoring procedures

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

### DNELs/DMELs

No DNELs/DMELs available.

### PNECs

No PNECs available

## 8.2 Exposure controls

### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Individual protection measures

#### Hygiene measures

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

#### Eye/face protection

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

### Skin protection

#### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### 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.

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## SECTION 8: Exposure controls/personal protection

- 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>	: 1H S/N 4Hz D2O 1H Lineshape	Liquid. Liquid. Liquid.
<b>Colour</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Odour</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Odour threshold</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>pH</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Melting point/freezing point</b>	: 1H S/N 4Hz D2O 1H Lineshape	-64°C 3.81°C Not available.
<b>Initial boiling point and boiling range</b>	: 1H S/N 4Hz D2O 1H Lineshape	60.9°C 101°C 55.5°C
<b>Flash point</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Closed cup: -17°C
<b>Evaporation rate</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not applicable. Not applicable. Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Vapour pressure</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Vapour density</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.

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## SECTION 9: Physical and chemical properties

<b>Relative density</b>	: 1H S/N 4Hz D2O 1H Lineshape	1.5 Not available. 0.872
<b>Solubility(ies)</b>	: 1H S/N 4Hz D2O 1H Lineshape	Very slightly soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Decomposition temperature</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Viscosity</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Explosive properties</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.
<b>Oxidising properties</b>	: 1H S/N 4Hz D2O 1H Lineshape	Not available. Not available. Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: 1H S/N 4Hz D2O 1H Lineshape	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>	: 1H S/N 4Hz D2O 1H Lineshape	The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: 1H S/N 4Hz D2O 1H Lineshape	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>	: 1H S/N 4Hz D2O 1H Lineshape	No specific data. No specific data. 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.

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## SECTION 10: Stability and reactivity

<b>10.5 Incompatible materials</b>	: 1H S/N 4Hz D2O 1H Lineshape	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. Reactive or incompatible with the following materials: oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: 1H S/N 4Hz D2O 1H Lineshape	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 produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	LC50 Inhalation Vapour	Rat	47702 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone Trichloromethane	LD50 Oral	Rat	5800 mg/kg	-
	LC50 Inhalation Vapour	Rat	47702 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-

#### Acute toxicity estimates

Route	ATE value
<b>1H S/N</b> Oral Inhalation (vapours)	500.6 mg/kg 3.003 mg/l
<b>1H Lineshape</b> Oral Inhalation (vapours)	9523.8 mg/kg 57.14 mg/l

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
Trichloromethane	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

#### Sensitiser

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## SECTION 11: Toxicological information

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	Category 1	Not determined	Not determined
<b>1H Lineshape</b> Trichloromethane	Category 1	Not determined	Not determined

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : 1H S/N  
4Hz D2O  
1H Lineshape

Routes of entry anticipated: Oral, Dermal, Inhalation.  
Not available.  
Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Inhalation** : 1H S/N  
4Hz D2O  
1H Lineshape

Toxic if inhaled.  
No known significant effects or critical hazards.  
Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Ingestion** : **1H S/N**  
4Hz D2O  
1H Lineshape

Harmful if swallowed.  
No known significant effects or critical hazards.  
Can cause central nervous system (CNS) depression.

**Skin contact** : 1H S/N  
4Hz D2O  
1H Lineshape

Causes skin irritation.  
No known significant effects or critical hazards.  
Defatting to the skin. May cause skin dryness and irritation.

**Eye contact** : 1H S/N  
4Hz D2O  
1H Lineshape

Causes serious eye irritation.  
No known significant effects or critical hazards.  
Causes serious eye irritation.

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

**Inhalation** : 1H S/N

Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

4Hz D2O  
1H Lineshape

No specific data.  
Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Ingestion** : **1H S/N**

Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

4Hz D2O  
1H Lineshape

No specific data.  
Adverse symptoms may include the following:  
reduced foetal weight

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## SECTION 11: Toxicological information

<b>Skin contact</b>	: 1H S/N	increase in foetal deaths skeletal malformations Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
	4Hz D2O 1H Lineshape	No specific data. Adverse symptoms may include the following: irritation dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
<b>Eye contact</b>	: 1H S/N	Adverse symptoms may include the following: pain or irritation watering redness
	4Hz D2O 1H Lineshape	No specific data. 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>	: 1H S/N	Causes damage to organs through prolonged or repeated exposure.
	4Hz D2O 1H Lineshape	No known significant effects or critical hazards. 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.
<b>Carcinogenicity</b>	: 1H S/N	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	4Hz D2O 1H Lineshape	No known significant effects or critical hazards. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: 1H S/N	No known significant effects or critical hazards.
	4Hz D2O 1H Lineshape	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: 1H S/N	Suspected of damaging the unborn child.
	4Hz D2O 1H Lineshape	No known significant effects or critical hazards. Suspected of damaging the unborn child.

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## SECTION 11: Toxicological information

<b>Developmental effects</b>	: 1H S/N 4Hz D2O 1H Lineshape	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>	: 1H S/N 4Hz D2O 1H Lineshape	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Other information</b>	: <del>1H</del> S/N  4Hz D2O 1H Lineshape	Adverse symptoms may include the following: jaundice, nausea or vomiting. Not available. Adverse symptoms may include the following: altered blood counts. Repeated exposure may cause skin dryness or cracking.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<del>1H</del> S/N ( <sup>2</sup> H)Chloroform	Acute EC50 13.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute EC50 2.803 mg/l Fresh water	Crustaceans - Cypris subglobosa	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 1.8 mg/l Fresh water	Daphnia - Daphnia magna	21 days
1H Lineshape ( <sup>2</sup> H <sub>6</sub> )Acetone	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 6900 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
Trichloromethane	Acute EC50 13.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute EC50 2.803 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 29000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 13.3 ppm 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 1.8 mg/l Fresh water	Daphnia - Daphnia magna	21 days

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

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## SECTION 12: Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	1.97	690	high
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	-0.23	-	low
Trichloromethane	1.97	690	high

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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

This 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.

**ADR/RID / IMDG / IATA** : Not regulated.

**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.

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## SECTION 14: Transport information

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

## SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : 1H S/N  
4Hz D2O  
1H Lineshape

For use in industrial installations only.

Not applicable.

For use in industrial installations only.

Other EU regulations

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

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Ingredient name	Annex	Status
<b>1H S/N</b> Chloroform	Annex I - Part 1	Listed
<b>1H Lineshape</b> Chloroform	Annex I - Part 1	Listed

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
<b>1H S/N</b> H2
<b>1H Lineshape</b> P5c

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

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## SECTION 15: Regulatory information

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

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

<b>Abbreviations and acronyms</b>	: 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
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
<input checked="" type="checkbox"/> <b>1H S/N</b> Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361d (Unborn child) STOT RE 1, H372	Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method
<b>1H Lineshape</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

### Full text of abbreviated H statements

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## SECTION 16: Other information

<p><b>1H S/N</b>                  H302                  H315                  H319                  H331                  H351                  H361d                  H372</p> <p><b>1H Lineshape</b>                  H225                  H302                  H315                  H319                  H331                  H336                  H351                  H361d                  H372                  H373</p>	<p>Harmful if swallowed.                  Causes skin irritation.                  Causes serious eye irritation.                  Toxic if inhaled.                  Suspected of causing cancer.                  Suspected of damaging the unborn child.                  Causes damage to organs through prolonged or repeated exposure.</p> <p>Highly flammable liquid and vapour.                  Harmful if swallowed.                  Causes skin irritation.                  Causes serious eye irritation.                  Toxic if inhaled.                  May cause drowsiness or dizziness.                  Suspected of causing cancer.                  Suspected of damaging the unborn child.                  Causes damage to organs through prolonged or repeated exposure.                  May cause damage to organs through prolonged or repeated exposure.</p>
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### [Full text of classifications \[CLP/GHS\]](#)

<p><b>1H S/N</b>                  Acute Tox. 3, H331                  Acute Tox. 4, H302                  Carc. 2, H351                  Eye Irrit. 2, H319                  Repr. 2, H361d                  Skin Irrit. 2, H315                  STOT RE 1, H372</p> <p><b>1H Lineshape</b>                  Acute Tox. 3, H331                  Acute Tox. 4, H302                  Carc. 2, H351                  EUH066                  Eye Irrit. 2, H319                  Flam. Liq. 2, H225                  Repr. 2, H361d                  Skin Irrit. 2, H315                  STOT RE 1, H372</p> <p>STOT RE 2, H373</p> <p>STOT SE 3, H336</p>	<p>ACUTE TOXICITY (inhalation) - Category 3                  ACUTE TOXICITY (oral) - Category 4                  CARCINOGENICITY - Category 2                  SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                  REPRODUCTIVE TOXICITY (Unborn child) - Category 2                  SKIN CORROSION/IRRITATION - Category 2                  SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1</p> <p>ACUTE TOXICITY (inhalation) - Category 3                  ACUTE TOXICITY (oral) - Category 4                  CARCINOGENICITY - Category 2                  Repeated exposure may cause skin dryness or cracking.                  SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                  FLAMMABLE LIQUIDS - Category 2                  REPRODUCTIVE TOXICITY (Unborn child) - Category 2                  SKIN CORROSION/IRRITATION - Category 2                  SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1                  SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2                  SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3</p>
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#### [Notice to reader](#)

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