

# SAFETY DATA SHEET



## NMR Sample Kit - 3mm General, Part Number 190350512

### 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

<b>Product name</b>	: NMR Sample Kit - 3mm General, Part Number 190350512		
<b>Part No. (Kit)</b>	: 190350512		
<b>Part No.</b>	: Autotest, no salt		190350606
	1H Lineshape		190350689
	ID 1		190350696
	13C S/N ASTM		190350669
	1H S/N		190350670
	Hi Temp Cal		190350679
	Lo Temp Cal		190350680
	App Test - Indanone		190350603

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

Identified uses		
Analytical chemistry.		
8 x 250 µl		
Autotest, no salt	250 µl	
1H Lineshape	250 µl	
ID 1	250 µl	
13C S/N ASTM	250 µl	
1H S/N	250 µl	
Hi Temp Cal	250 µl	
Lo Temp Cal	250 µl	
App Test - Indanone	250 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

## SECTION 2: Hazards identification

<b>Product definition</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mono-constituent substance (encapsulated in article) Mono-constituent substance (encapsulated in article) Mixture (encapsulated in article)
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### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

#### **1H Lineshape**

H225	FLAMMABLE LIQUIDS - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
H351	CARCINOGENICITY - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H412	LONG-TERM AQUATIC HAZARD - Category 3

#### **ID 1**

H301	ACUTE TOXICITY (oral) - Category 3
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
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
H412	LONG-TERM AQUATIC HAZARD - Category 3

#### **13C S/N ASTM**

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
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
H411	LONG-TERM AQUATIC HAZARD - Category 2

#### **1H S/N**

H302	ACUTE TOXICITY (oral) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
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
H412	LONG-TERM AQUATIC HAZARD - Category 3

#### **Hi Temp Cal**

H302	ACUTE TOXICITY (oral) - Category 4
H370	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (kidneys) - Category 1

#### **Lo Temp Cal**

H225	FLAMMABLE LIQUIDS - Category 2
H301	ACUTE TOXICITY (oral) - Category 3
H311	ACUTE TOXICITY (dermal) - Category 3
H331	ACUTE TOXICITY (inhalation) - Category 3
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
H360FD	TOXIC TO REPRODUCTION (Fertility and Unborn child) - Category 1B
H370	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (central nervous system (CNS)) - Category 1

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H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
 H412 LONG-TERM AQUATIC HAZARD - Category 3

**App Test - Indanone**

H302 ACUTE TOXICITY (oral) - Category 4  
 H315 SKIN CORROSION/IRRITATION - Category 2  
 H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
 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  
 H412 LONG-TERM AQUATIC HAZARD - Category 3

**Ingredients of unknown toxicity** : Autotest, no salt Not applicable.  
 1H Lineshape Not applicable.  
 ID 1 Not applicable.  
 13C S/N ASTM Not applicable.  
 1H S/N Not applicable.  
 Hi Temp Cal Not applicable.  
 Lo Temp Cal Not applicable.  
 App Test - Indanone Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.1%

**Ingredients of unknown ecotoxicity** : Autotest, no salt Not applicable.  
 1H Lineshape Not applicable.  
 ID 1 Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%  
 13C S/N ASTM Not applicable.  
 1H S/N Not applicable.  
 Hi Temp Cal Not applicable.  
 Lo Temp Cal Not applicable.  
 App Test - Indanone Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.1%

**Classification according to Directive 1999/45/EC [DPD]**

Autotest, no salt The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.  
 1H Lineshape The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
 ID 1 The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
 13C S/N ASTM The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
 1H S/N The product is classified as dangerous according to Directive 1999/45/EC and its amendments.  
 Hi Temp Cal The product is classified as dangerous according to Directive 67/548/EEC and its amendments.  
 Lo Temp Cal The product is classified as dangerous according to Directive 67/548/EEC and its amendments.  
 App Test - Indanone The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Autotest, no salt Not classified.  
 1H Lineshape F; R11  
 Carc. Cat. 3; R40  
 Xi; R36  
 R66, R67  
 ID 1 Carc. Cat. 3; R40  
 Xn; R22, R48/20/22  
 Xi; R38  
 13C S/N ASTM F; R11  
 Carc. Cat. 1; R45  
 Muta. Cat. 2; R46  
 T; R48/23/24/25  
 Xn; R65  
 Xi; R36/37/38

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	1H S/N	Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38
	Hi Temp Cal	Xn; R22
	Lo Temp Cal	F; R11 T; R23/24/25, R39/23/24/25
	App Test - Indanone	Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38
<b>Physical/chemical hazards</b>	: Autotest, no salt	Not applicable.
	1H Lineshape	Highly flammable.
	ID 1	Not applicable.
	13C S/N ASTM	Highly flammable.
	1H S/N	Not applicable.
	Hi Temp Cal	Not applicable.
	Lo Temp Cal	Highly flammable.
	App Test - Indanone	Not applicable.
<b>Human health hazards</b>	: Autotest, no salt	Not applicable.
	1H Lineshape	Limited evidence of a carcinogenic effect. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
	ID 1	Limited evidence of a carcinogenic effect. Harmful if swallowed. Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. Irritating to skin.
	13C S/N ASTM	May cause cancer. May cause heritable genetic damage. Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Also harmful: may cause lung damage if swallowed. Irritating to eyes, respiratory system and skin.
	1H S/N	Limited evidence of a carcinogenic effect. Harmful if swallowed. Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. Irritating to skin.
	Hi Temp Cal	Harmful if swallowed.
	Lo Temp Cal	Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
	App Test - Indanone	Limited evidence of a carcinogenic effect. Harmful if swallowed. Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. Irritating to skin.

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

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

**2.2 Label elements**

**Hazard pictograms**



**Signal word**

: Autotest, no salt	No signal word.
1H Lineshape	Danger
ID 1	Danger
13C S/N ASTM	Danger
1H S/N	Warning
Hi Temp Cal	Danger
Lo Temp Cal	Danger
App Test - Indanone	Warning

**Hazard statements**

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**SECTION 2: Hazards identification**

Autotest, no salt 1H Lineshape	<p>No known significant effects or critical hazards.  <b>GHS02</b> -                  Highly flammable liquid and vapour.  <b>GHS07</b> -                  Causes serious eye irritation.                  May cause drowsiness or dizziness.  <b>GHS08</b> -                  Suspected of causing cancer.                  Harmful to aquatic life with long lasting effects.</p>
ID 1	<p><b>GHS06</b> -                  Toxic if swallowed.  <b>GHS07</b> -                  Causes skin irritation.                  May cause respiratory irritation.                  Causes serious eye irritation.                  May cause drowsiness or dizziness.  <b>GHS08</b> -                  Suspected of causing cancer.                  May cause damage to organs through prolonged or repeated exposure.                  Harmful to aquatic life with long lasting effects.</p>
13C S/N ASTM	<p><b>GHS02</b> -                  Highly flammable liquid and vapour.  <b>GHS07</b> -                  Harmful if swallowed.                  Causes skin irritation.                  May cause respiratory irritation.                  Causes serious eye irritation.                  May cause drowsiness or dizziness.  <b>GHS08</b> -                  May cause genetic defects.                  May cause cancer.                  Causes damage to organs through prolonged or repeated exposure.  <b>GHS09</b> -                  Toxic to aquatic life with long lasting effects.</p>
1H S/N	<p><b>GHS07</b> -                  Harmful if swallowed.                  Causes skin irritation.                  May cause respiratory irritation.                  Causes serious eye irritation.                  May cause drowsiness or dizziness.  <b>GHS08</b> -                  Suspected of causing cancer.                  May cause damage to organs through prolonged or repeated exposure.                  Harmful to aquatic life with long lasting effects.</p>
Hi Temp Cal	<p><b>GHS07</b> -                  Harmful if swallowed.  <b>GHS08</b> -                  Causes damage to organs. (kidneys)</p>
Lo Temp Cal	<p><b>GHS02</b> -                  Highly flammable liquid and vapour.  <b>GHS06</b> -                  Toxic if swallowed.                  Toxic in contact with skin.                  Toxic if inhaled.  <b>GHS07</b> -                  Causes skin irritation.                  May cause respiratory irritation.                  Causes serious eye irritation.  <b>GHS08</b> -                  May damage fertility or the unborn child.</p>

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Causes damage to organs. (central nervous system (CNS))  
 Harmful to aquatic life with long lasting effects.  
**GHS07 -**  
 Harmful if swallowed.  
 Causes skin irritation.  
 May cause respiratory irritation.  
 Causes serious eye irritation.  
 May cause drowsiness or dizziness.  
**GHS08 -**  
 Suspected of causing cancer.  
 May cause damage to organs through prolonged or repeated exposure.  
 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** :  
**Response** :  
**Storage** :  
**Disposal** :

**Hazardous ingredients** : **1H Lineshape**  
 (<sup>2</sup>H<sub>6</sub>)Acetone  
 Trichloromethane

**ID 1**  
 (<sup>2</sup>H)Chloroform  
 Iodomethane (<sup>13</sup> C)

**13C S/N ASTM**  
 (<sup>2</sup>H<sub>6</sub>)Benzene  
 1,4-Dioxane

**1H S/N**  
 (<sup>2</sup>H)Chloroform

**Hi Temp Cal**  
 Ethanediol

**Lo Temp Cal**  
 Methanol

**App Test - Indanone**  
 (<sup>2</sup>H)Chloroform

**Supplemental label elements** : Autotest, no salt Safety data sheet available on request.  
 1H Lineshape Safety data sheet available on request.  
 ID 1 Safety data sheet available on request.  
 13C S/N ASTM Safety data sheet available on request.  
 1H S/N Safety data sheet available on request.  
 Hi Temp Cal Safety data sheet available on request.  
 Lo Temp Cal Safety data sheet available on request.  
 App Test - Indanone Safety data sheet available on request.

**Special packaging requirements**

**Tactile warning of danger** : Autotest, no salt Not applicable.  
 1H Lineshape Not applicable.  
 ID 1 Not applicable.  
 13C S/N ASTM Not applicable.  
 1H S/N Not applicable.  
 Hi Temp Cal Not applicable.  
 Lo Temp Cal Not applicable.  
 App Test - Indanone Not applicable.

**2.3 Other hazards**

## SECTION 2: Hazards identification

<b>Other hazards which do not result in classification</b>	: Autotest, no salt 1H Lineshape  ID 1 13C S/N ASTM  1H S/N Hi Temp Cal Lo Temp Cal  App Test - Indanone	None known. Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation. None known. Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation. None known. None known. Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation. 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>Substance/mixture</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article) Mono-constituent substance (encapsulated in article) Mono-constituent substance (encapsulated in article) Mixture (encapsulated in article)
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Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	EC: 200-662-2 CAS: 666-52-4 Index: 606-001-00-8	>=90	F; R11 Xi; R36 R66, R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 (Narcotic effects) Aquatic Chronic 3, H412	[1] [2]
Trichloromethane	EC: 200-663-8 CAS: 67-66-3 Index: 602-006-00-4	>=1 - <5	Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) STOT RE 2, H373 (heart, kidneys and liver) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	EC: 200-663-8 CAS: 865-49-6 Index: 602-006-00-4	>=90	Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) STOT RE 2, H373 (kidneys and liver) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
Iodomethane ( <sup>13</sup> C)	EC: 200-819-5 CAS: 4227-95-6	>=1 - <3	Carc. Cat. 3; R40 T; R23/25	Acute Tox. 3, H301 Acute Tox. 4, H312	[1]

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Trimethyl phosphite	Index: 602-005-00-9 EC: 204-471-5 CAS: 121-45-9	>=1 - <3	Xn; R21 Xi; R37/38  R10 Xn; R21/22 Xi; R36/37/38	Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 (Respiratory tract irritation) Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 (Respiratory tract irritation)	[1]
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	EC: 214-061-8 CAS: 1076-43-3 Index: 601-020-00-8	>=50 - <75	F; R11 Carc. Cat. 1; R45 Muta. Cat. 2; R46 T; R48/23/24/25 Xn; R65 Xi; R36/38	Flam. Liq. 2, H225 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) STOT RE 1, H372 (blood system) (oral) STOT RE 1, H372 (blood system) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
1,4-Dioxane	EC: 204-661-8 CAS: 123-91-1 Index: 603-024-00-5	>=35 - <50	F; R11 R19 Carc. Cat. 3; R40 Xi; R36/37 R66	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 (Respiratory tract irritation) STOT RE 1, H372 (kidneys and liver) (oral)	[1] [2]
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	EC: 200-663-8 CAS: 865-49-6 Index: 602-006-00-4	>=90	Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) STOT RE 2, H373 (kidneys and liver) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
<b>Hi Temp Cal</b> Ethanediol	EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	100	Xn; R22	Acute Tox. 4, H302 STOT SE 1, H370 (kidneys)	[A]
<b>Lo Temp Cal</b> Methanol	EC: 203-473-3 CAS: 107-21-1	100	Xn; R22	Acute Tox. 4, H302 STOT SE 1, H370	[A]

### SECTION 3: Composition/information on ingredients

<p><b>App Test - Indanone</b> (<sup>2</sup>H)Chloroform</p>	<p>Index: 603-027-00-1  EC: 200-663-8 CAS: 865-49-6 Index: 602-006-00-4</p>	<p>&gt;=90</p>	<p>Carc. Cat. 3; R40 Xn; R22, R48/20/22 Xi; R38  <b>See Section 16 for the full text of the R-phrases declared above.</b></p>	<p>(kidneys)  Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) STOT RE 2, H373 (kidneys and liver) Asp. Tox. 1, H304 Aquatic Chronic 3, H412  <b>See Section 16 for the full text of the H statements declared above.</b></p>	<p>[1] [2]</p>
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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

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

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

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

<b>Eye contact</b>	: Autotest, no salt	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.
	ID 1	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
	13C S/N ASTM	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.
	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.
	Hi Temp Cal	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. If necessary, call a poison center or physician.
	Lo Temp Cal	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. If necessary, call a poison center or physician.
	App Test - Indanone	Immediately flush eyes with plenty of water, occasionally

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		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>	: Autotest, no salt	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 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.
	ID 1	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.
	13C S/N ASTM	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.
	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.
	Hi Temp Cal	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is

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		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.
	Lo Temp Cal	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.
	App Test - Indanone	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.
<b>Skin contact</b>	: Autotest, no salt	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	1H Lineshape	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.
	ID 1	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.
	13C S/N ASTM	Wash skin thoroughly with soap and water or use recognised 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.
	1H 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.
	Hi Temp Cal	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Lo Temp Cal	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with

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		water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	App Test - Indanone	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.
<b>Ingestion</b>	: Autotest, no salt	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.
	1H Lineshape	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.
	ID 1	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. 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. 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 ASTM	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.
	1H 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 does not enter the lungs. Get medical attention. If necessary, call a poison

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	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.
Hi Temp Cal	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.
Lo Temp Cal	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. 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. 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.
App Test - Indanone	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Protection of first-aiders</b> : Autotest, no salt	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.
ID 1	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
13C S/N ASTM	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

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1H S/N	to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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.
Hi Temp Cal	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Lo Temp Cal	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.
App Test - Indanone	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>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation.
<b>Inhalation</b>	: Autotest, no salt 1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. No known significant effects or critical hazards. Toxic if inhaled. May cause respiratory irritation. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

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<b>Skin contact</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal  App Test - Indanone	No known significant effects or critical hazards. Defatting to the skin. May cause skin dryness and irritation. Causes skin irritation. Causes skin irritation. Defatting to the skin. Causes skin irritation. No known significant effects or critical hazards. Toxic in contact with skin. Causes skin irritation. Defatting to the skin. Causes skin irritation.
<b>Ingestion</b>	: Autotest, no salt 1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach. Toxic if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach. Harmful if swallowed. Toxic if swallowed. Irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

<b>Eye contact</b>	: Autotest, no salt 1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal Lo Temp Cal  App Test - Indanone	No specific data. Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness No specific data. Adverse symptoms may include the following: pain or irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: Autotest, no salt 1H Lineshape  ID 1	No specific data. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness

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	13C S/N ASTM	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	1H S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Hi Temp Cal Lo Temp Cal	No specific data. Adverse symptoms may include the following: respiratory tract irritation coughing reduced foetal weight increase in foetal deaths skeletal malformations
	App Test - Indanone	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
<b>Skin contact</b>	: Autotest, no salt 1H Lineshape	No specific data. Adverse symptoms may include the following: irritation dryness cracking
	ID 1	Adverse symptoms may include the following: irritation redness
	13C S/N ASTM	Adverse symptoms may include the following: irritation redness dryness cracking
	1H S/N	Adverse symptoms may include the following: irritation redness
	Hi Temp Cal Lo Temp Cal	No specific data. Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
	App Test - Indanone	Adverse symptoms may include the following: irritation redness

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<b>Ingestion</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal  App Test - Indanone	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations No specific data.
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**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Notes to physician</b>	: Autotest, no salt  1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal  Lo Temp Cal  App Test - Indanone	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	No specific treatment. No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	None known. Do not use water jet. None known. Do not use water jet. None known. None known. Do not use water jet. None known.

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

**SECTION 5: Firefighting measures**

<b>Hazards from the substance or mixture</b>	: Autotest, no salt	In a fire or if heated, a pressure increase will occur and the container may burst.	
	1H Lineshape	Highly flammable liquid and vapour. 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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	ID 1	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	13C S/N ASTM	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	1H S/N	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	Hi Temp Cal	In a fire or if heated, a pressure increase will occur and the container may burst.	
	Lo Temp Cal	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	App Test - Indanone	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	
	<b>Hazardous combustion products</b>	: Autotest, no salt	No specific data.
		1H Lineshape	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides
ID 1		Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides halogenated compounds carbonyl halides	
13C S/N ASTM		Decomposition products may include the following materials: carbon dioxide carbon monoxide	
	1H S/N	Decomposition products may include the following materials:	

**SECTION 5: Firefighting measures**

	carbon dioxide
	carbon monoxide
	halogenated compounds
	carbonyl halides
Hi Temp Cal	Decomposition products may include the following materials: carbon dioxide
	carbon monoxide
Lo Temp Cal	Decomposition products may include the following materials: carbon dioxide
	carbon monoxide
App Test - Indanone	Decomposition products may include the following materials: carbon dioxide
	carbon monoxide
	halogenated compounds
	carbonyl halides

**5.3 Advice for firefighters**

**Special precautions for fire-fighters**

: Autotest, no salt	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.
ID 1	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
13C S/N ASTM	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.
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.
Hi Temp Cal	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.
Lo Temp Cal	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.
App Test - Indanone	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.

**Special protective equipment for fire-fighters**

: Autotest, no salt	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.
ID 1	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

**SECTION 5: Firefighting measures**

13C S/N ASTM	basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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.
Hi Temp Cal	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.
Lo Temp Cal	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.
App Test - Indanone	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>	: Autotest, no salt	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. 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.
	ID 1	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	13C S/N ASTM	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	1H S/N	No action shall be taken involving any personal risk or

**SECTION 6: Accidental release measures****For emergency responders**

		without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Hi Temp Cal	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Lo Temp Cal	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	App Test - Indanone	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	: Autotest, no salt	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".
	ID 1	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 ASTM	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 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".
	Hi Temp Cal	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".
	Lo Temp Cal	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".
	App Test - Indanone	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**SECTION 6: Accidental release measures**

<b>6.2 Environmental precautions</b>	: Autotest, no salt	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). Water polluting material. May be harmful to the environment if released in large quantities.
	ID 1	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). Water polluting material. May be harmful to the environment if released in large quantities.
	13C S/N ASTM	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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
	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). Water polluting material. May be harmful to the environment if released in large quantities.
	Hi Temp Cal	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).
	Lo Temp Cal	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). Water polluting material. May be harmful to the environment if released in large quantities.
	App Test - Indanone	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). Water polluting material. May be harmful to the environment if released in large quantities.

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

<b>Methods for cleaning up</b>	: Autotest, no salt	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.
	ID 1	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 ASTM	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,

**SECTION 6: Accidental release measures**

	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 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.
Hi Temp Cal	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.
Lo Temp Cal	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.
App Test - Indanone	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.

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

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

<b>Protective measures</b>	: Autotest, no salt	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. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. 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.
	ID 1	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 vapour or mist. Do not ingest. Avoid release to the environment. 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 ASTM	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions

**SECTION 7: Handling and storage**

	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 vapour or mist. Do not ingest. Avoid release to the environment. 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.
1H 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 vapour or mist. Do not ingest. Avoid release to the environment. 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.
Hi Temp Cal	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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.
Lo Temp Cal	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. Avoid release to the environment. 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.
App Test - Indanone	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 vapour or mist. Do not ingest. Avoid release to the environment. 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.

**SECTION 7: Handling and storage****Advice on general occupational hygiene**

: Autotest, no salt

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.

ID 1  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

13C S/N ASTM  
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 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.

Hi Temp Cal  
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.

Lo Temp Cal  
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.

App Test - Indanone  
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**

: Autotest, no salt

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.

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.

**SECTION 7: Handling and storage**

	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.
ID 1	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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
13C S/N ASTM	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.
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 in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Hi Temp Cal	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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
Lo Temp Cal	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.
App Test - Indanone	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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

**7.3 Specific end use(s)**

## SECTION 7: Handling and storage

<b>Recommendations</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	Industrial applications, Professional applications. Industrial applications, Professional applications.
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**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

Product/ingredient name	Exposure limit values
<b>1H Lineshape</b> <sup>(2)H</sup> Acetone  Trichloromethane	<b>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values</b> TWA: 500 ppm 8 hours. TWA: 1210 mg/m <sup>3</sup> 8 hours. <b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 10 mg/m <sup>3</sup> 8 hours. TWA: 2 ppm 8 hours.
<b>ID 1</b> <sup>(2)H</sup> Chloroform	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 2 ppm 8 hours. TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>13C S/N ASTM</b> <sup>(2)H</sup> Benzene  1,4-Dioxane	<b>EU OEL (Europe, 12/2009). Absorbed through skin.</b> TWA: 1 ppm 8 hours. TWA: 3.25 mg/m <sup>3</sup> 8 hours. <b>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values</b> TWA: 73 mg/m <sup>3</sup> 8 hours. TWA: 20 ppm 8 hours.
<b>1H S/N</b> <sup>(2)H</sup> Chloroform	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 2 ppm 8 hours. TWA: 10 mg/m <sup>3</sup> 8 hours.
<b>Hi Temp Cal</b> Ethanediol	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> STEL: 104 mg/m <sup>3</sup> 15 minutes. STEL: 40 ppm 15 minutes. TWA: 52 mg/m <sup>3</sup> 8 hours. TWA: 20 ppm 8 hours.
<b>Lo Temp Cal</b> Methanol	<b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b> TWA: 260 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.

**SECTION 8: Exposure controls/personal protection**

**App Test - Indanone**  
(<sup>2</sup>H)Chloroform

**EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values**

TWA: 2 ppm 8 hours.

TWA: 10 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.

**Derived effect levels**

No DNELs available.

**Predicted effect concentrations**

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.

**Individual protection measures**

**Hygiene measures**

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

**Eye/face protection**

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

**Skin protection**

**Hand protection**

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

**Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

**Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

: 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 8: Exposure controls/personal protection**

**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>	: Autotest, no salt	Liquid.
	1H Lineshape	Liquid.
	ID 1	Liquid.
	13C S/N ASTM	Liquid.
	1H S/N	Liquid.
	Hi Temp Cal	Liquid. [Viscous liquid.]
	Lo Temp Cal	Liquid. [Clear.]
	App Test - Indanone	Liquid.
<b>Colour</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Colourless.
	1H S/N	Not available.
	Hi Temp Cal	Colourless.
	Lo Temp Cal	Colourless. Clear.
	App Test - Indanone	Colourless.
<b>Odour</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	Slight
	Lo Temp Cal	Characteristic.
	App Test - Indanone	Pleasant.-Sweet.
<b>Odour threshold</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	Not available.
	Lo Temp Cal	Not available.
	App Test - Indanone	Not available.
<b>pH</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	Not available.
	Lo Temp Cal	Not available.
	App Test - Indanone	Not available.
<b>Melting point/freezing point</b>	: Autotest, no salt	3.81°C
	1H Lineshape	-95°C
	ID 1	-64°C
	13C S/N ASTM	6.8°C
	1H S/N	-64°C
	Hi Temp Cal	-13°C
	Lo Temp Cal	-97.8°C
	App Test - Indanone	-63°C

**SECTION 9: Physical and chemical properties**

<b>Initial boiling point and boiling range</b>	: Autotest, no salt	101.1°C
	1H Lineshape	55.5°C
	ID 1	60.9°C
	13C S/N ASTM	79.1°C
	1H S/N	60.9°C
	Hi Temp Cal	198°C
	Lo Temp Cal	60.9°C
	App Test - Indanone	60.5 to 61.5°C
<b>Flash point</b>	: Autotest, no salt	Not available.
	1H Lineshape	Closed cup: -17°C
	ID 1	Not available.
	13C S/N ASTM	Closed cup: -18 to 23°C
	1H S/N	Not available.
	Hi Temp Cal	Closed cup: 111°C
		Open cup: 115°C
	Lo Temp Cal	Closed cup: 15°C [Setaflash.]
<b>Evaporation rate</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	0.01 (butyl acetate = 1)
	Lo Temp Cal	2.1 (butyl acetate = 1)
	App Test - Indanone	Not available.
<b>Flammability (solid, gas)</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	Not available.
	Lo Temp Cal	Not available.
	App Test - Indanone	Not available.
<b>Upper/lower flammability or explosive limits</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Lower: 1.3%
		Upper: 8%
	1H S/N	Not available.
	Hi Temp Cal	Lower: 3.2%
		Upper: 15.3%
<b>Vapour pressure</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	22.1 kPa [room temperature]
	1H S/N	Not available.
	Hi Temp Cal	0.007 kPa [room temperature]
	Lo Temp Cal	16.9 kPa [room temperature]
	App Test - Indanone	21.3 kPa [room temperature]
<b>Vapour density</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	2.77 [Air = 1]
	1H S/N	Not available.
	Hi Temp Cal	2.1 [Air = 1]
	Lo Temp Cal	1.1 [Air = 1]
	App Test - Indanone	4.1 [Air = 1]

**SECTION 9: Physical and chemical properties**

<b>Relative density</b>	: Autotest, no salt	1.1 [(D2O)]
	1H Lineshape	0.872
	ID 1	1500
	13C S/N ASTM	0.95
	1H S/N	1.5
	Hi Temp Cal	1.1
	Lo Temp Cal	0.79
	App Test - Indanone	1.492
<b>Solubility(ies)</b>	: Autotest, no salt	Easily soluble in the following materials: cold water and hot water.
	1H Lineshape	Easily soluble in the following materials: cold water, hot water and acetone.
	ID 1	Very slightly soluble in the following materials: cold water and hot water.
	13C S/N ASTM	Easily soluble in the following materials: cold water and hot water.
	1H S/N	Very slightly soluble in the following materials: cold water and hot water.
	Hi Temp Cal	Easily soluble in the following materials: cold water, hot water, methanol and acetone.
	Lo Temp Cal	Easily soluble in the following materials: cold water, hot water, methanol, n-octanol and acetone.
	App Test - Indanone	Very slightly soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	-1.93
	Lo Temp Cal	-0.77
	App Test - Indanone	Not available.
<b>Auto-ignition temperature</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	398°C
	Lo Temp Cal	455°C
	App Test - Indanone	Not available.
<b>Decomposition temperature</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	500 to 600°C
	Lo Temp Cal	Not available.
	App Test - Indanone	Not available.
<b>Viscosity</b>	: Autotest, no salt	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	13C S/N ASTM	Not available.
	1H S/N	Not available.
	Hi Temp Cal	Dynamic (room temperature): 16.1 mPa·s
	Lo Temp Cal	Dynamic (room temperature): 0.544 to 0.59 mPa·s
	App Test - Indanone	Not available.
<b>Explosive properties</b>	: Autotest, no salt	Not available.
	1H Lineshape	Vapours may form explosive mixtures with air.
	ID 1	Not available.
	13C S/N ASTM	Slightly explosive in the presence of the following materials or conditions: acids.
	1H S/N	Not available.
	Hi Temp Cal	Explosive in the presence of the following materials or

## SECTION 9: Physical and chemical properties

	conditions: oxidizing materials.
Lo Temp Cal	Not available.
App Test - Indanone	Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: Autotest, no salt	No specific test data related to reactivity available for this product or its ingredients.
	1H Lineshape	No specific test data related to reactivity available for this product or its ingredients.
	ID 1	No specific test data related to reactivity available for this product or its ingredients.
	13C S/N ASTM	No specific test data related to reactivity available for this product or its ingredients.
	1H S/N	No specific test data related to reactivity available for this product or its ingredients.
	Hi Temp Cal	No specific test data related to reactivity available for this product or its ingredients.
	Lo Temp Cal	No specific test data related to reactivity available for this product or its ingredients.
	App Test - Indanone	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Autotest, no salt	The product is stable.
	1H Lineshape	The product is stable.
	ID 1	The product is stable.
	13C S/N ASTM	The product is stable.
	1H S/N	The product is stable.
	Hi Temp Cal	The product is stable.
	Lo Temp Cal	The product is stable.
	App Test - Indanone	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Autotest, no salt	Under normal conditions of storage and use, hazardous reactions will not occur.
	1H Lineshape	Under normal conditions of storage and use, hazardous reactions will not occur.
	ID 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	13C S/N ASTM	Under normal conditions of storage and use, hazardous reactions will not occur.
	1H S/N	Under normal conditions of storage and use, hazardous reactions will not occur.
	Hi Temp Cal	Under normal conditions of storage and use, hazardous reactions will not occur.
	Lo Temp Cal	Under normal conditions of storage and use, hazardous reactions will not occur.
	App Test - Indanone	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: Autotest, no salt	No specific data.
	1H Lineshape	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.
	ID 1	No specific data.
	13C S/N ASTM	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	1H S/N	No specific data.
	Hi Temp Cal	No specific data.
	Lo Temp Cal	Avoid all possible sources of ignition (spark or flame). Do

**SECTION 10: Stability and reactivity**

		not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	App Test - Indanone	No specific data.
<b>10.5 Incompatible materials</b>	: Autotest, no salt	No specific data.
	1H Lineshape	Reactive or incompatible with the following materials: oxidizing materials
	ID 1	No specific data.
	13C S/N ASTM	Reactive or incompatible with the following materials: oxidizing materials
	1H S/N	No specific data.
	Hi Temp Cal	No specific data.
	Lo Temp Cal	Reactive or incompatible with the following materials: oxidizing materials
	App Test - Indanone	No specific data.
<b>10.6 Hazardous decomposition products</b>	: Autotest, no salt	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	1H Lineshape	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	ID 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	13C S/N ASTM	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	1H S/N	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Hi Temp Cal	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Lo Temp Cal	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	App Test - Indanone	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 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	-
<b>ID 1</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	-
Iodomethane ( <sup>13</sup> C)	LC50 Inhalation Vapour	Rat	1300 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	76 mg/kg	-
Trimethyl phosphite	LC50 Inhalation Vapour	Rat	182000 mg/m <sup>3</sup>	1 hours
	LD50 Dermal	Rabbit	933.8 mg/kg	-
	LD50 Oral	Rat	1350 mg/kg	-
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene 1,4-Dioxane	LD50 Oral	Rat	930 mg/kg	-
	LD50 Oral	Rat	4200 mg/kg	-
<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	-

## SECTION 11: Toxicological information

<b>Hi Temp Cal</b> Ethanediol	LD50 Oral	Rat	4700 mg/kg	-
<b>Lo Temp Cal</b> Methanol	LC50 Inhalation Gas. LC50 Inhalation Gas. LD50 Dermal LD50 Oral	Rat Rat Rabbit Rat	145000 ppm 64000 ppm 15800 mg/kg 5600 mg/kg	1 hours 4 hours - -
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	LC50 Inhalation Vapour LD50 Dermal LD50 Oral	Rat Rabbit Rat	47702 mg/m <sup>3</sup> >20 g/kg 300 mg/kg	4 hours - -

### Acute toxicity estimates

Route	ATE value
<b>Autotest, no salt</b> Oral Dermal Inhalation (vapours)	100000 mg/kg 229687.5 mg/kg 3000 mg/l
<b>1H Lineshape</b> Oral	30000 mg/kg
<b>ID 1</b> Oral Dermal Inhalation (vapours)	294.2 mg/kg 50505.5 mg/kg 130 mg/l
<b>13C S/N ASTM</b> Oral	1560.4 mg/kg
<b>1H S/N</b> Oral	300.3 mg/kg
<b>App Test - Indanone</b> Oral	306.4 mg/kg

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	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	-
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Iodomethane ( <sup>13</sup> C)	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rat	-	30 minutes 1	-

**SECTION 11: Toxicological information**

Trimethyl phosphite	Skin - Severe irritant	Rabbit	-	Grams 500	-
	Skin - Mild irritant	Human	-	milligrams 10 minutes	1 -
	Eyes - Mild irritant	Rabbit	-	Grams 0.1 Milliliters	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Eyes - Moderate irritant	Rabbit	-	88 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
1,4-Dioxane	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	515 milligrams	-
<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>Hi Temp Cal</b> Ethanediol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 milligrams	-
	Skin - Mild irritant	Rabbit	-	555 milligrams	-
<b>Lo Temp Cal</b> Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitiser

**Conclusion/Summary** : Not available.

Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

**SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone Trichloromethane	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Iodomethane ( <sup>13</sup> C)	Category 3	Not applicable.	Respiratory tract irritation
Trimethyl phosphite	Category 3	Not applicable.	Respiratory tract irritation
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1,4-Dioxane	Category 3	Not applicable.	Respiratory tract irritation
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
<b>Hi Temp Cal</b> Ethenediol	Category 1	Not determined	kidneys
<b>Lo Temp Cal</b> Methanol	Category 1 Category 3	Not determined Not applicable.	central nervous system (CNS) Respiratory tract irritation
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>1H Lineshape</b> Trichloromethane	Category 2	Not determined	heart, kidneys and liver
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	Category 2	Not determined	kidneys and liver
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Category 1	Oral Inhalation	blood system blood system
1,4-Dioxane	Category 1	Oral	kidneys and liver
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	Category 2	Not determined	kidneys and liver
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	Category 2	Not determined	kidneys and liver

**SECTION 11: Toxicological information**

Aspiration hazard

Product/ingredient name	Result
<b>1H Lineshape</b> Trichloromethane	ASPIRATION HAZARD - Category 1
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	ASPIRATION HAZARD - Category 1
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	ASPIRATION HAZARD - Category 1
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	ASPIRATION HAZARD - Category 1
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

Potential acute health effects

<b>Inhalation</b>	: Autotest, no salt 1H Lineshape	No known significant effects or critical hazards. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	ID 1	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	13C S/N ASTM	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	1H S/N	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. Toxic if inhaled. May cause respiratory irritation. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Ingestion</b>	: Autotest, no salt 1H Lineshape	No known significant effects or critical hazards. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	ID 1	Toxic if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	13C S/N ASTM	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	1H S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
	Hi Temp Cal Lo Temp Cal App Test - Indanone	Harmful if swallowed. Toxic if swallowed. Irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

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<b>Skin contact</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal  App Test - Indanone	No known significant effects or critical hazards. Defatting to the skin. May cause skin dryness and irritation. Causes skin irritation. Causes skin irritation. Defatting to the skin. Causes skin irritation. No known significant effects or critical hazards. Toxic in contact with skin. Causes skin irritation. Defatting to the skin. Causes skin irritation.
<b>Eye contact</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. No known significant effects or critical hazards. Causes serious eye irritation. Causes serious eye irritation.

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

<b>Inhalation</b>	: Autotest, no salt 1H Lineshape    ID 1    13C S/N ASTM    1H S/N   Hi Temp Cal Lo Temp Cal  App Test - Indanone	No specific data. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness No specific data. Adverse symptoms may include the following: respiratory tract irritation coughing reduced foetal weight increase in foetal deaths skeletal malformations Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
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**SECTION 11: Toxicological information**

<b>Ingestion</b>	:	Autotest, no salt	No specific data.	
		1H Lineshape	No specific data.	
		ID 1	No specific data.	
		13C S/N ASTM	No specific data.	
		1H S/N	No specific data.	
		Hi Temp Cal	No specific data.	
		Lo Temp Cal	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations	
		App Test - Indanone	No specific data.	
<b>Skin contact</b>	:	Autotest, no salt	No specific data.	
		1H Lineshape	Adverse symptoms may include the following: irritation dryness cracking	
		ID 1	Adverse symptoms may include the following: irritation redness	
		13C S/N ASTM	Adverse symptoms may include the following: irritation redness dryness cracking	
		1H S/N	Adverse symptoms may include the following: irritation redness	
			Hi Temp Cal	No specific data.
			Lo Temp Cal	Adverse symptoms may include the following: irritation redness dryness cracking reduced foetal weight increase in foetal deaths skeletal malformations
			App Test - Indanone	Adverse symptoms may include the following: irritation redness
	<b>Eye contact</b>	:	Autotest, no salt	No specific data.
			1H Lineshape	Adverse symptoms may include the following: pain or irritation watering redness
		ID 1	Adverse symptoms may include the following: pain or irritation watering redness	
		13C S/N ASTM	Adverse symptoms may include the following: pain or irritation watering redness	
		1H S/N	Adverse symptoms may include the following: pain or irritation watering redness	
			Hi Temp Cal	No specific data.
			Lo Temp Cal	Adverse symptoms may include the following: pain or irritation watering redness
			App Test - Indanone	Adverse symptoms may include the following: pain or irritation watering redness

**SECTION 11: Toxicological information**Delayed and immediate effects and also chronic effects from short and long term exposureShort 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>	: Autotest, no salt 1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal Lo Temp Cal  App Test - Indanone	No known significant effects or critical hazards. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. May cause damage to organs through prolonged or repeated exposure. 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. May cause damage to organs through prolonged or repeated exposure. No known significant effects or critical hazards. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. May cause damage to organs through prolonged or repeated exposure.
<b>Carcinogenicity</b>	: Autotest, no salt 1H Lineshape  ID 1  13C S/N ASTM  1H S/N  Hi Temp Cal Lo Temp Cal App Test - Indanone	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. May cause 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. No known significant effects or critical hazards. No known significant effects or critical hazards. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. 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. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Autotest, no salt 1H Lineshape ID 1 13C S/N ASTM 1H S/N Hi Temp Cal Lo Temp Cal App Test - Indanone	No known significant effects or critical hazards. No known significant effects or critical hazards. May damage the unborn child. No known significant effects or critical hazards.

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**Developmental effects** : Autotest, no salt No known significant effects or critical hazards.  
 1H Lineshape No known significant effects or critical hazards.  
 ID 1 No known significant effects or critical hazards.  
 13C S/N ASTM No known significant effects or critical hazards.  
 1H S/N No known significant effects or critical hazards.  
 Hi Temp Cal No known significant effects or critical hazards.  
 Lo Temp Cal No known significant effects or critical hazards.  
 App Test - Indanone No known significant effects or critical hazards.

**Fertility effects** : Autotest, no salt No known significant effects or critical hazards.  
 1H Lineshape No known significant effects or critical hazards.  
 ID 1 No known significant effects or critical hazards.  
 13C S/N ASTM No known significant effects or critical hazards.  
 1H S/N No known significant effects or critical hazards.  
 Hi Temp Cal No known significant effects or critical hazards.  
 Lo Temp Cal May damage fertility.  
 App Test - Indanone No known significant effects or critical hazards.

### Toxicokinetics

**Absorption** : Autotest, no salt Not available.  
 1H Lineshape Not available.  
 ID 1 Not available.  
 13C S/N ASTM Not available.  
 1H S/N Not available.  
 Hi Temp Cal Not available.  
 Lo Temp Cal Not available.  
 App Test - Indanone Not available.

**Distribution** : Autotest, no salt Not available.  
 1H Lineshape Not available.  
 ID 1 Not available.  
 13C S/N ASTM Not available.  
 1H S/N Not available.  
 Hi Temp Cal Not available.  
 Lo Temp Cal Not available.  
 App Test - Indanone Not available.

**Metabolism** : Autotest, no salt Not available.  
 1H Lineshape Not available.  
 ID 1 Not available.  
 13C S/N ASTM Not available.  
 1H S/N Not available.  
 Hi Temp Cal Not available.  
 Lo Temp Cal Not available.  
 App Test - Indanone Not available.

**Elimination** : Autotest, no salt Not available.  
 1H Lineshape Not available.  
 ID 1 Not available.  
 13C S/N ASTM Not available.  
 1H S/N Not available.  
 Hi Temp Cal Not available.  
 Lo Temp Cal Not available.  
 App Test - Indanone Not available.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
1H Lineshape ( <sup>2</sup> H <sub>6</sub> )Acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 100000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours

**SECTION 12: Ecological information**

Trichloromethane	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	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 63800 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	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
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	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
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	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
1,4-Dioxane	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)	4 weeks
	Acute LC50 6700000 µg/l Marine water	Fish - Menidia beryllina	96 hours
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	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
<b>Hi Temp Cal</b> Ethanediol	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 100000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
<b>Lo Temp Cal</b> Methanol	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 10000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours

## SECTION 12: Ecological information

<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	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 Chronic EC10 3.61 mg/l Fresh water	Fish - Lepomis macrochirus Algae - Chlamydomonas reinhardtii - Exponential growth phase	96 hours 72 hours
Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days	

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Hi Temp Cal</b> Ethenediol	-	56 % - Readily - 1 days	100 mg/l	Activated sludge

  

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Hi Temp Cal</b> Ethenediol	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>1H Lineshape</b> ( <sup>2</sup> H <sub>6</sub> )Acetone	-0.23	-	low
Trichloromethane	1.97	690	high
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	1.97	690	high
Iodomethane ( <sup>13</sup> C)	1.57	-	low
Trimethyl phosphite	-0.73	-	low
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	2.13	11	low
1,4-Dioxane	-0.42	0.3 to 0.7	low
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	1.97	690	high
<b>Hi Temp Cal</b> Ethenediol	-1.93	-	low
<b>Lo Temp Cal</b> Methanol	-0.77	<10	low
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	1.97	690	high

### 12.4 Mobility in soil

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

**SECTION 12: Ecological information**

**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.

**European waste catalogue (EWC)**

Waste code	Waste designation
Lo Temp Cal 07 07 04*	other organic solvents, washing liquids and mother liquors

**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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

This Safety Data Sheet (EU\_English) 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**

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

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

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 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****Substances of very high concern**

None of the components are listed.

## SECTION 15: Regulatory information

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : For use in industrial installations only.

### Other EU regulations

**Europe inventory** : Not determined.

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Listed

**Integrated pollution prevention and control list (IPPC) - Air** : Listed

**Integrated pollution prevention and control list (IPPC) - Water** : Not listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
<b>1H Lineshape</b> Trichloromethane	Carc. 2, H351	-	-	-
<b>ID 1</b> ( <sup>2</sup> H)Chloroform	Carc. 2, H351	-	-	-
Iodomethane ( <sup>13</sup> C)	Carc. 2, H351	-	-	-
<b>13C S/N ASTM</b> ( <sup>2</sup> H <sub>6</sub> )Benzene	Carc. 1A, H350	Muta. 1B, H340	-	-
1,4-Dioxane	Carc. 2, H351	-	-	-
<b>1H S/N</b> ( <sup>2</sup> H)Chloroform	Carc. 2, H351	-	-	-
<b>Lo Temp Cal</b> Methanol	-	-	Repr. 1B, H360D (Unborn child)	Repr. 1B, H360F (Fertility)
<b>App Test - Indanone</b> ( <sup>2</sup> H)Chloroform	Carc. 2, H351	-	-	-

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

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

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

**SECTION 16: Other information**

Classification	Justification
<p><b>1H Lineshape</b>                      Flam. Liq. 2, H225                      Eye Irrit. 2, H319                      Carc. 2, H351                      STOT SE 3, H336 (Narcotic effects)                      Aquatic Chronic 3, H412</p>	<p>On basis of test data                      Calculation method                      Calculation method                      Calculation method                      Calculation method</p>
<p><b>ID 1</b>                      Acute Tox. 3, H301                      Skin Irrit. 2, H315                      Eye Irrit. 2, H319                      Carc. 2, H351                      STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)                      STOT RE 2, H373                      Aquatic Chronic 3, H412</p>	<p>Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method</p>
<p><b>13C S/N ASTM</b>                      Flam. Liq. 2, H225                      Acute Tox. 4, H302                      Skin Irrit. 2, H315                      Eye Irrit. 2, H319                      Muta. 1B, H340                      Carc. 1A, H350                      STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)                      STOT RE 1, H372                      Asp. Tox. 1, H304                      Aquatic Chronic 2, H411</p>	<p>On basis of test data                      Calculation method                      Calculation method</p>
<p><b>1H S/N</b>                      Acute Tox. 4, H302                      Skin Irrit. 2, H315                      Eye Irrit. 2, H319                      Carc. 2, H351                      STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)                      STOT RE 2, H373                      Aquatic Chronic 3, H412</p>	<p>Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method</p>
<p><b>Hi Temp Cal</b>                      Acute Tox. 4, H302                      STOT SE 1, H370 (kidneys)</p>	<p>Expert judgment                      Expert judgment</p>
<p><b>Lo Temp Cal</b>                      Flam. Liq. 2, H225                      Acute Tox. 3, H301                      Acute Tox. 3, H311                      Acute Tox. 3, H331                      Skin Irrit. 2, H315                      Eye Irrit. 2, H319                      Repr. 1B, H360FD (Fertility and Unborn child)                      STOT SE 1, H370 (central nervous system (CNS))                      STOT SE 3, H335 (Respiratory tract irritation)                      Aquatic Chronic 3, H412</p>	<p>Expert judgment                      Expert judgment                      Expert judgment                      On basis of test data                      On basis of test data                      On basis of test data                      Expert judgment                      Expert judgment                      Expert judgment                      On basis of test data</p>
<p><b>App Test - Indanone</b>                      Acute Tox. 4, H302                      Skin Irrit. 2, H315                      Eye Irrit. 2, H319                      Carc. 2, H351                      STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)</p>	<p>Calculation method                      Calculation method                      Calculation method                      Calculation method                      Calculation method</p>

**SECTION 16: Other information**

STOT RE 2, H373 Aquatic Chronic 3, H412	Calculation method Calculation method
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**Full text of abbreviated H statements**

**1H Lineshape**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H351	Suspected of causing cancer.
H373 (heart, kidneys and liver)	May cause damage to organs through prolonged or repeated exposure. (heart, kidneys and liver)
H412	Harmful to aquatic life with long lasting effects.

**ID 1**

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302 (oral)	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311 (dermal)	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H373 (kidneys and liver)	May cause damage to organs through prolonged or repeated exposure. (kidneys and liver)
H412	Harmful to aquatic life with long lasting effects.

**13C S/N ASTM**

H225	Highly flammable liquid and vapour.
H302 (oral)	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H372 (blood system) (inhalation)	Causes damage to organs through prolonged or repeated exposure if inhaled. (blood system)
H372 (blood system) (oral)	Causes damage to organs through prolonged or repeated exposure if swallowed. (blood system)
H372 (kidneys and liver) (oral)	Causes damage to organs through prolonged or repeated exposure if swallowed. (kidneys and liver)

**SECTION 16: Other information**

H411	Toxic to aquatic life with long lasting effects.
<b>1H S/N</b>	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H373 (kidneys and liver)	May cause damage to organs through prolonged or repeated exposure. (kidneys and liver)
H412	Harmful to aquatic life with long lasting effects.
<b>Hi Temp Cal</b>	
H302	Harmful if swallowed.
H370 (kidneys)	Causes damage to organs. (kidneys)
<b>Lo Temp Cal</b>	
H225	Highly flammable liquid and vapour.
H301 (oral)	Toxic if swallowed.
H311 (dermal)	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331 (inhalation)	Toxic if inhaled.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)
H360FD (Fertility and Unborn child)	May damage fertility. May damage the unborn child.
H370 (central nervous system (CNS))	Causes damage to organs. (central nervous system (CNS))
H412	Harmful to aquatic life with long lasting effects.
<b>App Test - Indanone</b>	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H373 (kidneys and liver)	May cause damage to organs through prolonged or repeated exposure. (kidneys and liver)
H412	Harmful to aquatic life with long lasting effects.
<b>Full text of classifications [CLP/GHS]</b>	<b>1H Lineshape</b> Acute Tox. 3, H301 ACUTE TOXICITY (oral) - Category 3 Aquatic Chronic 3, H412 LONG-TERM AQUATIC HAZARD - Category 3 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1 Carc. 2, H351 CARCINOGENICITY - Category 2 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 STOT RE 2, H373 (heart, kidneys and liver) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (heart, kidneys and liver) - Category 2 STOT SE 3, H335 and SPECIFIC TARGET ORGAN TOXICITY (SINGLE

**SECTION 16: Other information**

H336 (Respiratory tract irritation and Narcotic effects) STOT SE 3, H336 (Narcotic effects)	EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3  SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
<b>ID 1</b>	
Acute Tox. 2, H330 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 4, H302 Acute Tox. 4, H312 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 Carc. 2, H351 Eye Irrit. 2, H319 Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT RE 2, H373	ACUTE TOXICITY (inhalation) - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 LONG-TERM AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT RE 2, H373 (kidneys and liver) STOT SE 3, H335 (Respiratory tract irritation) STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys and liver) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
<b>13C S/N ASTM</b>	
Acute Tox. 4, H302 Aquatic Chronic 2, H411 Asp. Tox. 1, H304 Carc. 1A, H350 Carc. 2, H351 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Muta. 1B, H340 Skin Irrit. 2, H315 STOT RE 1, H372	ACUTE TOXICITY (oral) - Category 4 LONG-TERM AQUATIC HAZARD - Category 2 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 1A CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 GERM CELL MUTAGENICITY - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
STOT RE 1, H372 (blood system) (inhalation) STOT RE 1, H372 (blood system) (oral) STOT RE 1, H372 (kidneys and liver) (oral) STOT SE 3, H335 (Respiratory tract irritation) STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system) (inhalation) - Category 1  SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system) (oral) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys and liver) (oral) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
<b>1H S/N</b>	
Acute Tox. 3, H301 Acute Tox. 4, H302 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 Carc. 2, H351 Eye Irrit. 2, H319 Skin Irrit. 2, H315	ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (oral) - Category 4 LONG-TERM AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2

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<p>STOT RE 2, H373</p> <p>STOT RE 2, H373 (kidneys and liver) STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)</p> <p><b>Hi Temp Cal</b> Acute Tox. 4, H302 STOT SE 1, H370 (kidneys)</p> <p><b>Lo Temp Cal</b> Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Aquatic Chronic 3, H412 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Repr. 1B, H360FD (Fertility and Unborn child) Skin Irrit. 2, H315 STOT SE 1, H370 (central nervous system (CNS)) STOT SE 3, H335 (Respiratory tract irritation)</p> <p><b>App Test - Indanone</b> Acute Tox. 3, H301 Acute Tox. 4, H302 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 Carc. 2, H351 Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT RE 2, H373</p> <p>STOT RE 2, H373 (kidneys and liver) STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)</p>	<p>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys and liver) - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3</p> <p>ACUTE TOXICITY (oral) - Category 4</p> <p>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (kidneys) - Category 1</p> <p>ACUTE TOXICITY (oral) - Category 3</p> <p>ACUTE TOXICITY (dermal) - Category 3</p> <p>ACUTE TOXICITY (inhalation) - Category 3</p> <p>LONG-TERM AQUATIC HAZARD - Category 3</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2</p> <p>FLAMMABLE LIQUIDS - Category 2</p> <p>TOXIC TO REPRODUCTION (Fertility and Unborn child) - Category 1B</p> <p>SKIN CORROSION/IRRITATION - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (central nervous system (CNS)) - Category 1</p> <p>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</p> <p>ACUTE TOXICITY (oral) - Category 3</p> <p>ACUTE TOXICITY (oral) - Category 4</p> <p>LONG-TERM AQUATIC HAZARD - Category 3</p> <p>ASPIRATION HAZARD - Category 1</p> <p>CARCINOGENICITY - Category 2</p> <p>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2</p> <p>SKIN CORROSION/IRRITATION - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys and liver) - Category 2</p> <p>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3</p>
<p><b>Full text of abbreviated R phrases</b></p>	<p>: Autotest, no salt 1H Lineshape</p>
<p>ID 1</p>	<p>Not applicable. R11- Highly flammable. R40- Limited evidence of a carcinogenic effect. R22- Harmful if swallowed. R48/20/22- Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. R36- Irritating to eyes. R38- Irritating to skin. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapours may cause drowsiness and dizziness. R10- Flammable. R40- Limited evidence of a carcinogenic effect. R23/25- Toxic by inhalation and if swallowed. R21- Harmful in contact with skin. R22- Harmful if swallowed.</p>

**SECTION 16: Other information**

	R21/22- Harmful in contact with skin and if swallowed. R48/20/22- Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. R38- Irritating to skin. R37/38- Irritating to respiratory system and skin. R36/37/38- Irritating to eyes, respiratory system and skin. R11- Highly flammable. R19- May form explosive peroxides. R45- May cause cancer. R40- Limited evidence of a carcinogenic effect. R46- May cause heritable genetic damage. R48/23/24/25- Also toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R65- Also harmful: may cause lung damage if swallowed. R36/37- Irritating to eyes and respiratory system. R36/38- Irritating to eyes and skin. R36/37/38- Irritating to eyes, respiratory system and skin. R66- Repeated exposure may cause skin dryness or cracking.
13C S/N ASTM	R40- Limited evidence of a carcinogenic effect. R22- Harmful if swallowed. R48/20/22- Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. R38- Irritating to skin. R22- Harmful if swallowed. R11- Highly flammable. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
1H S/N	R40- Limited evidence of a carcinogenic effect. R22- Harmful if swallowed. R48/20/22- Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. R38- Irritating to skin. R22- Harmful if swallowed. R11- Highly flammable. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Hi Temp Cal Lo Temp Cal	R40- Limited evidence of a carcinogenic effect. R22- Harmful if swallowed. R48/20/22- Harmful: danger of serious damage to health in case of prolonged exposure through inhalation and if swallowed. R38- Irritating to skin.
App Test - Indanone	Not applicable. F - Highly flammable Carc. Cat. 3 - Carcinogen category 3 Xn - Harmful Xi - Irritant
Full text of classifications [DSD/DPD] : Autotest, no salt 1H Lineshape	Carc. Cat. 3 - Carcinogen category 3 T - Toxic Xn - Harmful Xi - Irritant
ID 1	F - Highly flammable Carc. Cat. 1 - Carcinogen category 1 Carc. Cat. 3 - Carcinogen category 3 Muta. Cat. 2 - Mutagen category 2 T - Toxic Xn - Harmful Xi - Irritant
13C S/N ASTM	Carc. Cat. 3 - Carcinogen category 3 Xn - Harmful Xi - Irritant
1H S/N	F - Highly flammable Carc. Cat. 1 - Carcinogen category 1 Carc. Cat. 3 - Carcinogen category 3 Muta. Cat. 2 - Mutagen category 2 T - Toxic Xn - Harmful Xi - Irritant
Hi Temp Cal Lo Temp Cal	Carc. Cat. 3 - Carcinogen category 3 Xn - Harmful Xi - Irritant
App Test - Indanone	F - Highly flammable T - Toxic Carc. Cat. 3 - Carcinogen category 3 Xn - Harmful Xi - Irritant

## SECTION 16: Other information

**Date of issue/ Date of revision** : 25/02/2014

**Date of previous issue** : No previous validation.

**Version** : 1

### Notice to reader

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.