

SAFETY DATA SHEET



Sample Kit for Indirect Detection, Part Number 94906547

Section 1. Identification

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

Product name : Sample Kit for Indirect Detection, Part Number 94906547
Part No. (Chemical Kit) : 94906547
Part No. : 1H S/N 96812070
 1H Lineshape 96812089
 ID 1 96812096
 ID 2 96812097
 2-Ethyl-1-Indanone in CDCl3 190185503
 Autotest, no salt 190185506

Validation date : 12/06/2013.

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

Material uses : Analytical chemistry.
 1H S/N 860 µl
 1H Lineshape 860 µl
 ID 1 860 µl
 ID 2 860 µl
 2-Ethyl-1-Indanone in CDCl3 860 µl
 Autotest, no salt 860 µl

Supplier/Manufacturer : Agilent Technologies, Inc.
 Logistics Center - Americas
 500 Ships Landing Way
 New Castle, Delaware 19720
 800-227-9770

In case of emergency : CHEMTREC®: 1-800-424-9300

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.

OSHA/HCS status	: 1H S/N	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	1H Lineshape	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	ID 1	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	ID 2	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	2-Ethyl-1-Indanone in CDCl3	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Autotest, no salt	This material is considered hazardous by the

Section 2. Hazards identification

Classification of the substance or mixture

: 1H S/N

OSHA Hazard Communication Standard (29 CFR 1910.1200).

ACUTE TOXICITY (oral) - Category 4
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 ASPIRATION HAZARD - Category 1

1H Lineshape

FLAMMABLE LIQUIDS - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 ASPIRATION HAZARD - Category 1

ID 1

ACUTE TOXICITY (oral) - Category 4
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 ASPIRATION HAZARD - Category 1

ID 2

FLAMMABLE LIQUIDS - Category 4
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

2-Ethyl-1-Indanone in CDCI3

ACUTE TOXICITY (oral) - Category 4
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 ASPIRATION HAZARD - Category 1

Autotest, no salt

TOXIC TO REPRODUCTION (Fertility) - Category 1B
 TOXIC TO REPRODUCTION (Unborn child) - Category 1B

Section 2. Hazards identification

Ingredients of unknown toxicity	: 1H S/N	Not applicable.
	1H Lineshape	Not applicable.
	ID 1	Not applicable.
	ID 2	Not applicable.
	2-Ethyl-1-Indanone in CDCl3	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.1%
	Autotest, no salt	Not applicable.

GHS label elements

Hazard pictograms



Signal word

: 1H S/N	Danger
1H Lineshape	Danger
ID 1	Danger
ID 2	Warning
2-Ethyl-1-Indanone in CDCl3	Danger
Autotest, no salt	Danger

Hazard statements

: 1H S/N	Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure.
1H Lineshape	Highly flammable liquid and vapor. Causes serious eye irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure.
ID 1	Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure.
ID 2	Combustible liquid. Causes eye irritation. May cause damage to organs through prolonged or repeated exposure.
2-Ethyl-1-Indanone in CDCl3	Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure.

Section 2. Hazards identification

Autotest, no salt

May damage fertility or the unborn child.

Precautionary statements

Prevention

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

Response

- : P314 - Get medical attention if you feel unwell.
- P308 + P313 - IF exposed or concerned: Get medical attention.
- P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
- P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P302 + P352 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.
- P332 + P313 - If skin irritation occurs: Get medical attention.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical attention.

Storage

- : P405 - Store locked up.
- P403 - Store in a well-ventilated place.
- P235 - Keep cool.

Disposal

- : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

- : 1H S/N None known.
- 1H Lineshape Avoid contact with skin and clothing. Wash thoroughly after handling.
- ID 1 None known.
- ID 2 None known.
- 2-Ethyl-1-Indanone in CDCI3 None known.
- Autotest, no salt None known.

Hazards not otherwise classified

- : 1H S/N None known.
- 1H Lineshape Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
- ID 1 None known.
- ID 2 None known.
- 2-Ethyl-1-Indanone in CDCI3 None known.
- Autotest, no salt None known.

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.

Substance/mixture	: 1H S/N	Mixture
	1H Lineshape	Mixture
	ID 1	Mixture
	ID 2	Mixture
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Mixture Mixture

Ingredient name	%	CAS number
1H S/N		
(² H)Chloroform	60 - 100	865-49-6
Ethylbenzene	< 0.1	100-41-4
1H Lineshape		
(² H ₆)Acetone	60 - 100	666-52-4
Trichloromethane	0.1 - 1	67-66-3
ID 1		
(² H)Chloroform	60 - 100	865-49-6
Iodomethane (¹³ C)	0.1 - 1	4227-95-6
Trimethyl phosphite	0.1 - 1	121-45-9
ID 2		
di[(² H ₃)Methyl] sulphoxide	60 - 100	2206-27-1
Benzamide (¹⁵ N)	1 - 5	31656-62-9
2-Ethyl-1-Indanone in CDCl₃		
(² H)Chloroform	60 - 100	865-49-6
Autotest, no salt		
Methanol (¹³ C)	< 0.1	14742-26-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: 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.
	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.

Section 4. First aid measures

	ID 2	Continue to rinse for at least 10 minutes. Get medical attention. 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 following exposure or if feeling unwell.
	2-Ethyl-1-Indanone in CDCI3	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.
	Autotest, no salt	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 irritation occurs.
Inhalation	: 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.
	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

Section 4. First aid measures

ID 2

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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. 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.

2-Ethyl-1-Indanone in CDCl₃

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.

Autotest, no salt

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Skin contact	: 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.
	1H Lineshape	Wash skin thoroughly with soap and water or use recognized 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.
	ID 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	2-Ethyl-1-Indanone in CDCl ₃	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.
	Autotest, no salt	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: 1H S/N	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	1H Lineshape	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting

Section 4. First aid measures

ID 1	<p>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. Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
ID 2	<p>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
2-Ethyl-1-Indanone in CDCl ₃	<p>Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Autotest, no salt	<p>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink.</p>

Section 4. First aid measures

Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation. Causes eye irritation. Causes serious eye irritation. No known significant effects or critical hazards.
Inhalation	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Can cause central nervous system (CNS) depression. May cause drowsiness and 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 and 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. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. No known significant effects or critical hazards.
Skin contact	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Causes skin irritation. Defatting to the skin. May cause skin dryness and irritation. Causes skin irritation. No known significant effects or critical hazards. Causes skin irritation. No known significant effects or critical hazards.
Ingestion	: 1H S/N 1H Lineshape ID 1	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if

Section 4. First aid measures

swallowed and enters airways. Irritating to mouth, throat and stomach.
 May be irritating to mouth, throat and stomach. Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
 No known significant effects or critical hazards.

ID 2
 2-Ethyl-1-Indanone in CDCl3

Autotest, no salt

Over-exposure signs/symptoms

Eye contact

: 1H S/N

Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

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

ID 2

Adverse symptoms may include the following:
 irritation
 watering
 redness

2-Ethyl-1-Indanone in CDCl3

Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Autotest, no salt

No specific data.

Inhalation

: 1H S/N

Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness

1H Lineshape

Adverse symptoms may include the following:
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness

ID 1

Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness

ID 2
 2-Ethyl-1-Indanone in CDCl3

No specific data.
 Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 nausea or vomiting
 headache

Section 4. First aid measures

		Autotest, no salt	drowsiness/fatigue dizziness/vertigo unconsciousness Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	1H S/N	Adverse symptoms may include the following: irritation redness
		1H Lineshape	Adverse symptoms may include the following: irritation dryness cracking
		ID 1	Adverse symptoms may include the following: irritation redness
		ID 2 2-Ethyl-1-Indanone in CDCI3	No specific data. Adverse symptoms may include the following: irritation redness
		Autotest, no salt	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	1H S/N	Adverse symptoms may include the following: nausea or vomiting
		1H Lineshape	Adverse symptoms may include the following: nausea or vomiting
		ID 1	Adverse symptoms may include the following: nausea or vomiting
		ID 2 2-Ethyl-1-Indanone in CDCI3	No specific data. Adverse symptoms may include the following: nausea or vomiting
		Autotest, no salt	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician	:	1H S/N	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		1H Lineshape	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		ID 1	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 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		2-Ethyl-1-Indanone in CDCI3	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical

Section 4. First aid measures

	Autotest, no salt	surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: 1H S/N	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	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.
	ID 2	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.
	2-Ethyl-1-Indanone in CDCI3	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.
	Autotest, no salt	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

[Extinguishing media](#)

Section 5. Fire-fighting measures

Suitable extinguishing media	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO ₂ , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO ₂ , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	None known. Do not use water jet. None known. Do not use water jet. None known. None known.
Specific hazards arising from the chemical	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	In a fire or if heated, a pressure increase will occur and the container may burst. Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst. Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors 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. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds carbonyl halides	
Special protective actions for fire-fighters	: 1H S/N 1H Lineshape 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. 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. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No

Section 5. Fire-fighting measures

	ID 2	action shall be taken involving any personal risk or without suitable training.
	2-Ethyl-1-Indanone in CDCl ₃	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.
	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.
Special protective equipment for fire-fighters	: 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.
	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.
	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.
	ID 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	2-Ethyl-1-Indanone in CDCl ₃	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : 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

Environmental precautions : 1H S/N	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
1H Lineshape	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
ID 1	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
ID 2	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
2-Ethyl-1-Indanone in CDCl ₃	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Autotest, no salt	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

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.
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.
ID 2	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.
2-Ethyl-1-Indanone in CDCl ₃	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.
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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : 1H S/N

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

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 breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 vapor or mist. Do not swallow. 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.

ID 2

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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

Section 7. Handling and storage

2-Ethyl-1-Indanone in CDCl₃

away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

Autotest, no salt

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 ingest. Avoid breathing vapor or mist. 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.

Advice on general occupational hygiene

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

Conditions for safe storage, including any incompatibilities

: 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 unlabeled 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

Section 7. Handling and storage

ID 1	<p>ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</p> <p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</p>
ID 2	<p>Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</p>
2-Ethyl-1-Indanone in CDCI3	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</p>
Autotest, no salt	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</p>

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.

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
1H S/N ⁽² H)Chloroform	ACGIH TLV (United States, 3/2012). TWA: 10 ppm 8 hours. TWA: 49 mg/m ³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 2 ppm 8 hours. TWA: 9.78 mg/m ³ 8 hours. NIOSH REL (United States, 6/2009). STEL: 2 ppm 60 minutes. STEL: 9.78 mg/m ³ 60 minutes. OSHA PEL (United States, 6/2010). CEIL: 50 ppm CEIL: 240 mg/m ³
Ethylbenzene	ACGIH TLV (United States, 3/2012). TWA: 20 ppm 8 hours. NIOSH REL (United States, 1/2013). STEL: 545 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m ³ 10 hours. TWA: 100 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 545 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
1H Lineshape ⁽² H ₆)Acetone	ACGIH TLV (United States, 3/2012). TWA: 500 ppm 8 hours. TWA: 1188 mg/m ³ 8 hours. STEL: 750 ppm 15 minutes. STEL: 1782 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 750 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 2400 mg/m ³ 15 minutes. NIOSH REL (United States, 6/2009). TWA: 250 ppm 10 hours. TWA: 590 mg/m ³ 10 hours. OSHA PEL (United States, 6/2010). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m ³ 8 hours.
Trichloromethane	ACGIH TLV (United States, 3/2012). TWA: 49 mg/m ³ 8 hours. TWA: 10 ppm 8 hours. NIOSH REL (United States, 1/2013).

Section 8. Exposure controls/personal protection

ID 1

(²H)Chloroform

STEL: 9.78 mg/m³ 60 minutes.
 STEL: 2 ppm 60 minutes.
OSHA PEL (United States, 6/2010).
 CEIL: 240 mg/m³
 CEIL: 50 ppm
OSHA PEL 1989 (United States, 3/1989).
 TWA: 9.78 mg/m³ 8 hours.
 TWA: 2 ppm 8 hours.

ACGIH TLV (United States, 3/2012).

TWA: 10 ppm 8 hours.
 TWA: 49 mg/m³ 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 2 ppm 8 hours.
 TWA: 9.78 mg/m³ 8 hours.

NIOSH REL (United States, 6/2009).

STEL: 2 ppm 60 minutes.
 STEL: 9.78 mg/m³ 60 minutes.

OSHA PEL (United States, 6/2010).

CEIL: 50 ppm
 CEIL: 240 mg/m³

ACGIH TLV (United States, 3/2012).

Absorbed through skin.

TWA: 2 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

Absorbed through skin.

TWA: 2 ppm 8 hours.
 TWA: 10 mg/m³ 8 hours.

NIOSH REL (United States, 6/2009).

Absorbed through skin.

TWA: 2 ppm 10 hours.
 TWA: 10 mg/m³ 10 hours.

OSHA PEL (United States, 6/2010).

Absorbed through skin.

TWA: 5 ppm 8 hours.
 TWA: 28 mg/m³ 8 hours.

ACGIH TLV (United States, 3/2012).

TWA: 2 ppm 8 hours.
 TWA: 10 mg/m³ 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 2 ppm 8 hours.
 TWA: 10 mg/m³ 8 hours.

NIOSH REL (United States, 1/2013).

TWA: 2 ppm 10 hours.
 TWA: 10 mg/m³ 10 hours.

Iodomethane (¹³ C)

Trimethyl phosphite

ID 2

di[(²H₃)Methyl] sulphoxide

AIHA WEEL (United States, 10/2011).

TWA: 250 ppm 8 hours.

2-Ethyl-1-Indanone in CDCI3

(²H)Chloroform

ACGIH TLV (United States, 3/2012).

TWA: 10 ppm 8 hours.
 TWA: 49 mg/m³ 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 2 ppm 8 hours.

Section 8. Exposure controls/personal protection

Autotest, no salt
Methanol (¹³C)

TWA: 9.78 mg/m³ 8 hours.
NIOSH REL (United States, 6/2009).
STEL: 2 ppm 60 minutes.
STEL: 9.78 mg/m³ 60 minutes.
OSHA PEL (United States, 6/2010).
CEIL: 50 ppm
CEIL: 240 mg/m³

ACGIH TLV (United States, 3/2012).
Absorbed through skin.
TWA: 200 ppm 8 hours.
TWA: 262 mg/m³ 8 hours.
STEL: 250 ppm 15 minutes.
STEL: 328 mg/m³ 15 minutes.
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin.
TWA: 200 ppm 8 hours.
TWA: 260 mg/m³ 8 hours.
STEL: 250 ppm 15 minutes.
STEL: 325 mg/m³ 15 minutes.
NIOSH REL (United States, 6/2009).
Absorbed through skin.
TWA: 200 ppm 10 hours.
TWA: 260 mg/m³ 10 hours.
STEL: 250 ppm 15 minutes.
STEL: 325 mg/m³ 15 minutes.
OSHA PEL (United States, 6/2010).
TWA: 200 ppm 8 hours.
TWA: 260 mg/m³ 8 hours.

Appropriate engineering controls

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

Environmental exposure controls

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

Individual protection measures

Hygiene measures

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

Eye/face protection

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

Skin protection

Section 8. Exposure controls/personal protection

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

Section 9. Physical and chemical properties

Appearance

Physical state	: 1H S/N	Liquid.
	1H Lineshape	Liquid.
	ID 1	Liquid.
	ID 2	Liquid. [Clear.]
	2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Liquid. Liquid.
Color	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Colorless.
	2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Colorless. Not available.
Odor	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Ripe olive.
	2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Pleasant.-Sweet. Not available.
Odor threshold	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Not available. Not available.
pH	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCI3 Autotest, no salt	Not available. Not available.

Section 9. Physical and chemical properties

Melting point	: 1H S/N	-64°C (-83.2°F)
	1H Lineshape	-95°C (-139°F)
	ID 1	-64°C (-83.2°F)
	ID 2	18 to 18.54°C (64.4 to 65.4°F)
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	-63°C (-81.4°F) 3.81°C (38.9°F)
Boiling point	: 1H S/N	60.9°C (141.6°F)
	1H Lineshape	55.5°C (131.9°F)
	ID 1	60.9°C (141.6°F)
	ID 2	189°C (372.2°F)
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	60.5 to 61.5°C (140.9 to 142.7°F) 101.1°C (214°F)
Flash point	: 1H S/N	Not available.
	1H Lineshape	Closed cup: -17°C (1.4°F)
	ID 1	Not available.
	ID 2	Closed cup: 88°C (190.4°F)
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Not available. Not available.
Evaporation rate	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Not available. Not available.
Flammability (solid, gas)	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Not available. Not available.
Lower and upper explosive (flammable) limits	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Lower: 3%
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Not available. Not available.
Vapor pressure	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	0.061 kPa (0.46 mm Hg) [room temperature]
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	21.3 kPa (160 mm Hg) [room temperature] Not available.
Vapor density	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	1.04 [Air = 1]
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	4.1 [Air = 1] Not available.
Relative density	: 1H S/N	1.5
	1H Lineshape	0.872
	ID 1	1500
	ID 2	1.18
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	1.492 1.1 [(D ₂ O)]

Section 9. Physical and chemical properties

Solubility	: 1H S/N	Very slightly 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.
	ID 2	Soluble in the following materials: cold water and hot water.
	2-Ethyl-1-Indanone in CDCl ₃	Very slightly soluble in the following materials: cold water and hot water.
	Autotest, no salt	Easily soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.	
Partition coefficient: n-octanol/water	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃	Not available.
	Autotest, no salt	Not available.
Auto-ignition temperature	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	215°C (419°F)
	2-Ethyl-1-Indanone in CDCl ₃	Not available.
	Autotest, no salt	Not available.
Decomposition temperature	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃	Not available.
	Autotest, no salt	Not available.
Viscosity	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃	Not available.
	Autotest, no salt	Not available.

Section 10. Stability and reactivity

Reactivity	: 1H S/N	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.
	ID 2	No specific test data related to reactivity available for this product or its ingredients.
	2-Ethyl-1-Indanone in CDCl ₃	No specific test data related to reactivity available for this product or its ingredients.
	Autotest, no salt	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

Chemical stability	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	The product is stable. The product is stable. The product is stable. The product is stable. The product is stable. The product is stable.
Possibility of hazardous reactions	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	No specific data. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. No specific data. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. No specific data. No specific data.
Incompatible materials	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	No specific data. Reactive or incompatible with the following materials: oxidizing materials No specific data. Reactive or incompatible with the following materials: oxidizing materials No specific data. No specific data.
Hazardous decomposition products	: 1H S/N 1H Lineshape ID 1 ID 2 2-Ethyl-1-Indanone in CDCl ₃	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 10. Stability and reactivity

Autotest, no salt

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

Section 11. Toxicological information**Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
1H S/N (² H)Chloroform	LC50 Inhalation Vapor	Rat	47702 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-
Ethylbenzene	LC50 Inhalation Gas.	Rat	4000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
1H Lineshape (² H ₆)Acetone	LD50 Oral	Rat	5800 mg/kg	-
Trichloromethane	LC50 Inhalation Vapor	Rat	47702 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-
ID 1 (² H)Chloroform	LC50 Inhalation Vapor	Rat	47702 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-
Iodomethane (¹³ C)	LC50 Inhalation Vapor	Rat	1300 mg/m ³	4 hours
	LD50 Oral	Rat	76 mg/kg	-
Trimethyl phosphite	LC50 Inhalation Vapor	Rat	182000 mg/m ³	1 hours
	LD50 Dermal	Rabbit	933.8 mg/kg	-
	LD50 Oral	Rat	1350 mg/kg	-
ID 2 di[(² H ₃)Methyl] sulphoxide	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-
2-Ethyl-1-Indanone in CDCI3 (² H)Chloroform	LC50 Inhalation Vapor	Rat	47702 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	300 mg/kg	-
Autotest, no salt Methanol (¹³ C)	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
1H S/N (² H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Ethylbenzene	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
1H Lineshape (² H ₆)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	-
ID 1 (² H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Iodomethane (¹³ C)	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rat	-	30 minutes 1 Grams	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Human	-	10 minutes 1 Grams	-
Trimethyl phosphite	Eyes - Mild irritant	Rabbit	-	0.1 Milliliters	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-
ID 2 di[(² H ₃)Methyl] sulphoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 milligrams	-
2-Ethyl-1-Indanone in CDCI3 (² H)Chloroform	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Section 11. Toxicological information

Autotest, no salt Methanol (¹³ C)	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
1H S/N (² H)Chloroform	-	2B	Reasonably anticipated to be a human carcinogen.
Ethylbenzene	-	2B	-
1H Lineshape Trichloromethane	-	2B	Reasonably anticipated to be a human carcinogen.
ID 1 (² H)Chloroform	-	2B	Reasonably anticipated to be a human carcinogen.
Iodomethane (¹³ C)	-	3	-
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
1H S/N (² H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
1H Lineshape (² H ₆)Acetone	Category 3	Not applicable.	Narcotic effects
Trichloromethane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
ID 1			

Section 11. Toxicological information

(² H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Iodomethane (¹³ C)	Category 3	Not applicable.	Respiratory tract irritation
Trimethyl phosphite	Category 3	Not applicable.	Respiratory tract irritation
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Autotest, no salt Methanol (¹³ C)	Category 1	Not determined	central nervous system (CNS)
	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1H S/N (² H)Chloroform	Category 2	Not determined	kidneys and liver
1H Lineshape Trichloromethane	Category 2	Not determined	heart, kidneys and liver
ID 1 (² H)Chloroform	Category 2	Not determined	kidneys and liver
ID 2 di[(² H ₃)Methyl] sulphoxide	Category 2	Oral	kidneys and liver
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	Category 2	Not determined	kidneys and liver

Aspiration hazard

Name	Result
1H S/N (² H)Chloroform Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
ID 1 (² H)Chloroform	ASPIRATION HAZARD - Category 1
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact	: 1H S/N	Causes serious eye irritation.
	1H Lineshape	Causes serious eye irritation.
	ID 1	Causes serious eye irritation.
	ID 2	Causes eye irritation.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Causes serious eye irritation. No known significant effects or critical hazards.
Inhalation	: 1H S/N	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	1H Lineshape	Can cause central nervous system (CNS) depression. May cause drowsiness and 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 and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	ID 2	No known significant effects or critical hazards.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. No known significant effects or critical hazards.
Skin contact	: 1H S/N	Causes skin irritation.
	1H Lineshape	Defatting to the skin. May cause skin dryness and irritation.
	ID 1	Causes skin irritation.
	ID 2	No known significant effects or critical hazards.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Causes skin irritation. No known significant effects or critical hazards.
Ingestion	: 1H S/N	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
	1H Lineshape	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
	ID 1	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
	ID 2	May be irritating to mouth, throat and stomach.
	2-Ethyl-1-Indanone in CDCl ₃ Autotest, no salt	Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. No known significant effects or critical hazards.

[Symptoms related to the physical, chemical and toxicological characteristics](#)

Section 11. Toxicological information

Eye contact	: 1H S/N	Adverse symptoms may include the following: pain or irritation watering redness
	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
	ID 2	Adverse symptoms may include the following: irritation watering redness
	2-Ethyl-1-Indanone in CDCl ₃	Adverse symptoms may include the following: pain or irritation watering redness
	Autotest, no salt	No specific data.
Inhalation	: 1H S/N	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	1H Lineshape	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	ID 1	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	ID 2	No specific data.
	2-Ethyl-1-Indanone in CDCl ₃	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Autotest, no salt	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Section 11. Toxicological information

Skin contact	: 1H S/N	Adverse symptoms may include the following: irritation redness
	1H Lineshape	Adverse symptoms may include the following: irritation dryness cracking
	ID 1	Adverse symptoms may include the following: irritation redness
	ID 2	No specific data.
	2-Ethyl-1-Indanone in CDCl ₃	Adverse symptoms may include the following: irritation redness
	Autotest, no salt	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: 1H S/N	Adverse symptoms may include the following: nausea or vomiting
	1H Lineshape	Adverse symptoms may include the following: nausea or vomiting
	ID 1	Adverse symptoms may include the following: nausea or vomiting
	ID 2	No specific data.
	2-Ethyl-1-Indanone in CDCl ₃	Adverse symptoms may include the following: nausea or vomiting
	Autotest, no salt	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General	: 1H S/N	May cause damage to organs through prolonged or repeated exposure.
	1H Lineshape	May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	ID 1	May cause damage to organs through prolonged or repeated exposure.
	ID 2	May cause damage to organs through prolonged or repeated exposure.
	2-Ethyl-1-Indanone in CDCl ₃	May cause damage to organs through prolonged or repeated exposure.

Section 11. Toxicological information

Carcinogenicity	Autotest, no salt	No known significant effects or critical hazards.
	: 1H S/N	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	1H Lineshape	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	ID 1	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	ID 2	No known significant effects or critical hazards.
Mutagenicity	2-Ethyl-1-Indanone in CDCI3	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	Autotest, no salt	No known significant effects or critical hazards.
	: 1H S/N	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.
Teratogenicity	ID 2	No known significant effects or critical hazards.
	2-Ethyl-1-Indanone in CDCI3	No known significant effects or critical hazards.
	Autotest, no salt	No known significant effects or critical hazards.
	: 1H S/N	No known significant effects or critical hazards.
	1H Lineshape	No known significant effects or critical hazards.
Developmental effects	ID 1	No known significant effects or critical hazards.
	ID 2	No known significant effects or critical hazards.
	2-Ethyl-1-Indanone in CDCI3	No known significant effects or critical hazards.
	Autotest, no salt	No known significant effects or critical hazards.
	: 1H S/N	May damage the unborn child.
Fertility effects	1H Lineshape	No known significant effects or critical hazards.
	ID 1	No known significant effects or critical hazards.
	ID 2	No known significant effects or critical hazards.
	2-Ethyl-1-Indanone in CDCI3	No known significant effects or critical hazards.
	Autotest, no salt	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
1H S/N Oral	500.5 mg/kg
1H Lineshape Oral	30000 mg/kg
ID 1 Oral	477.3 mg/kg
Dermal	50505.5 mg/kg
Inhalation (vapors)	300 mg/l
ID 2 Oral	25000 mg/kg
2-Ethyl-1-Indanone in CDCI3 Oral	510.7 mg/kg

Section 11. Toxicological information

Other information	: 1H S/N	Not available.
	1H Lineshape	Not available.
	ID 1	Not available.
	ID 2	Not available.
	2-Ethyl-1-Indanone in CDCl ₃	Not available.
	Autotest, no salt	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	
1H S/N (² 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	
	Ethylbenzene	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days
		Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
		Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
		Acute EC50 2970 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
		Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
Acute LC50 4200 µg/l Fresh water Chronic NOEC 1000 µg/l Fresh water		Fish - Oncorhynchus mykiss Algae - Pseudokirchneriella subcapitata	96 hours 96 hours	
1H Lineshape (² H ₆)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	
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days	
	Trichloromethane	Acute EC50 13.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
		Acute EC50 2.803 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
Acute LC50 63800 µg/l Fresh water		Daphnia - Daphnia magna - Neonate	48 hours	
Acute LC50 13.3 ppm 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	
ID 1				

Section 12. Ecological information

^{(2)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 Acute LC50 29000 µg/l Fresh water Acute LC50 13300 µg/l Fresh water Chronic EC10 3.61 mg/l Fresh water	Crustaceans - Penaeus duorarum Daphnia - Daphnia magna Fish - Lepomis macrochirus Algae - Chlamydomonas reinhardtii - Exponential growth phase	48 hours 48 hours 96 hours 72 hours
ID 2 di[(² H ₃)Methyl] sulphoxide	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Benzamide (¹⁵ N)	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water Acute LC50 661000 µg/l Fresh water	Fish - Pimephales promelas Fish - Pimephales promelas	96 hours 96 hours
2-Ethyl-1-Indanone in CDCI3 ^{(2)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 Acute LC50 29000 µg/l Fresh water Acute LC50 13300 µg/l Fresh water Chronic EC10 3.61 mg/l Fresh water	Crustaceans - Penaeus duorarum Daphnia - Daphnia magna Fish - Lepomis macrochirus Algae - Chlamydomonas reinhardtii - Exponential growth phase	48 hours 48 hours 96 hours 72 hours
Autotest, no salt Methanol (¹³ C)	Chronic NOEC 6300 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 16.912 mg/l Marine water Acute LC50 2500000 µg/l Marine water	Algae - Ulva pertusa Crustaceans - Crangon crangon - Adult	96 hours 48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 100000 µg/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

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1H S/N Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
1H S/N ^{(2)H} Chloroform Ethylbenzene	1.97 3.6	690 -	high low
1H Lineshape ^{(2)H₆} Acetone Trichloromethane	-0.23 1.97	- 690	low high

Section 12. Ecological information

ID 1			
(² H)Chloroform	1.97	690	high
Iodomethane (¹³ C)	1.57	-	low
Trimethyl phosphite	-0.73	-	low
ID 2			
di[(² H ₃)Methyl] sulphoxide	-1.35	3.16	low
2-Ethyl-1-Indanone in CDCl₃			
(² H)Chloroform	1.97	690	high
Autotest, no salt			
Methanol (¹³ C)	-0.77	<10	low

Mobility in soil

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

Other adverse effects :

1H S/N	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.
ID 2	No known significant effects or critical hazards.
2-Ethyl-1-Indanone in CDCl ₃	No known significant effects or critical hazards.
Autotest, no salt	No known significant effects or critical hazards.

Section 13. Disposal considerations

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

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

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

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

Section 14. Transport information

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

Regulatory information

Additional information : **Remarks**
De minimis quantities

DOT / IMDG / IATA / : Not regulated.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** Acetonitrile (¹⁵N)
Commerce control list precursor: Trimethyl phosphite
United States inventory (TSCA 8b): Not determined.
Clean Water Act (CWA) 307: (²H)Chloroform; Ethylbenzene; Acetonitrile (¹⁵N); Chromium(III) 4-oxopent-2-ene-2-olate; Trichloromethane
Clean Water Act (CWA) 311: (²H)Chloroform; Ethylbenzene; Trichloromethane
Clean Air Act (CAA) 112 regulated toxic substances: (²H)Chloroform

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

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
1H S/N (² H)Chloroform	60 - 100	Yes.	-	-	-	-
1H Lineshape Trichloromethane	0.1 - 1	Yes.	-	-	-	-
ID 1 (² H)Chloroform	60 - 100	Yes.	-	-	-	-
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	60 - 100	Yes.	-	-	-	-

SARA 304 RQ : Not applicable.

SARA 311/312

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

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
1H S/N (² H)Chloroform Ethylbenzene	60 - 100 < 0.1	No. Yes.	No. No.	No. No.	Yes. Yes.	Yes. Yes.
1H Lineshape (² H ₆)Acetone Trichloromethane	60 - 100 0.1 - 1	Yes. No.	No. No.	No. No.	Yes. Yes.	No. Yes.
ID 1 (² H)Chloroform Iodomethane (¹³ C) Trimethyl phosphite	60 - 100 0.1 - 1 0.1 - 1	No. No. Yes.	No. No. No.	No. No. No.	Yes. Yes. Yes.	Yes. Yes. No.
ID 2 di[(² H ₃)Methyl] sulphoxide Benzamide (¹⁵ N)	60 - 100 1 - 5	Yes. No.	No. No.	No. No.	Yes. Yes.	Yes. No.
2-Ethyl-1-Indanone in CDCI3 (² H)Chloroform	60 - 100	No.	No.	No.	Yes.	Yes.
Autotest, no salt Methanol (¹³ C)	< 0.1	Yes.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1H S/N (² H)Chloroform Ethylbenzene	865-49-6 100-41-4	60 - 100 0.1 - 1
	1H Lineshape Trichloromethane	67-66-3	0.1 - 1
	ID 1 (² H)Chloroform Iodomethane (¹³ C)	865-49-6 4227-95-6	60 - 100 0.1 - 1
	ID 2 Benzamide (¹⁵ N)	31656-62-9	1 - 5
	2-Ethyl-1-Indanone in CDCI3 (² H)Chloroform	865-49-6	60 - 100
Supplier notification	1H S/N (² H)Chloroform Ethylbenzene	865-49-6 100-41-4	60 - 100 <0.1
	1H Lineshape Trichloromethane	67-66-3	0.1 - 1
	ID 1 (² H)Chloroform Iodomethane (¹³ C)	865-49-6 4227-95-6	60 - 100 0.1 - 1
	ID 2		

Section 15. Regulatory information

	Benzamide (¹⁵ N)	31656-62-9	1 - 5
	2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	865-49-6	60 - 100

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

State regulations

- Massachusetts** : The following components are listed: CHLOROFORM; ACETONE
- New York** : The following components are listed: Chloroform; Methane, trichloro-; Acetone; 2-Propanone; Chloroform; Methane, trichloro-
- New Jersey** : The following components are listed: CHLOROFORM; METHANE, TRICHLORO-; DIMETHYL SULFOXIDE; METHANE, SULFINYLBI-; ACETONE; 2-PROPANONE; CHLOROFORM; METHANE, TRICHLORO-
- Pennsylvania** : The following components are listed: METHANE, TRICHLORO-; di[(²H₃)Methyl] sulphoxide; 2-PROPANONE; METHANE, TRICHLORO-

California Prop. 65

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

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
1H S/N (² H)Chloroform	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
1H Lineshape Trichloromethane	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
ID 1 (² H)Chloroform	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
Iodomethane (¹³ C)	Yes.	No.	No.	No.
2-Ethyl-1-Indanone in CDCl₃ (² H)Chloroform	Yes.	Yes.	20 µg/day (ingestion) 40 µg/day (inhalation)	No.
Autotest, no salt Methanol (¹³ C)	No.	Yes.	No.	No.

Canada inventory : Not determined.

International regulations

Section 15. Regulatory information

International lists	: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: Not determined. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III Chemicals	: Not listed

Section 16. Other information

History

Date of issue	: 12/06/2013.
Date of previous issue	: 11/15/2011.
Version	: 2

✔ Indicates information that has changed from previously issued version.

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.