

# SAFETY DATA SHEET

PCR-RFLP Fish Species ID Kit, Part Number 5500-0001

## Section 1. Identification

<b>Product identifier</b>	: PCR-RFLP Fish Species ID Kit, Part Number 5500-0001
<b>Part no. (chemical kit)</b>	: 5500-0001
<b>Part no.</b>	: <input checked="" type="checkbox"/> PCR Master Mix 5190-2345 10X PCR Primer Mix 5190-2346 60 mM EDTA 5190-2354 10X Ddel Buffer 5190-2348 10X NlaIII/HaeIII Buffer 5190-2347 100X BSA 5190-2352 10X Ddel Restriction Enzyme 5190-2350 10X NlaIII Restriction Enzyme 5190-2351 10X HaeIII Restriction Enzyme 5190-2349 Positive Control Salmon DNA 5190-2353 Nuclease Free Water 5190-2355
<b>Material uses</b>	: Analytical reagent. <input checked="" type="checkbox"/> PCR Master Mix 1.25 ml 10X PCR Primer Mix 0.25 ml 60 mM EDTA 0.3 ml 10X Ddel Buffer 0.05 ml 10X NlaIII/HaeIII Buffer 0.1 ml 100X BSA 0.1 ml 10X Ddel Restriction Enzyme 0.05 ml 10X NlaIII Restriction Enzyme 0.05 ml 10X HaeIII Restriction Enzyme 0.05 ml Positive Control Salmon DNA 0.01 ml (250 ng/μl 10 μl) Nuclease Free Water 0.11 ml
<b>Supplier/Manufacturer</b>	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
<b>Emergency telephone number (with hours of operation)</b>	: CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

### Classification of the substance or mixture

<b>60 mM EDTA</b> H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
<b>10X Ddel Buffer</b> H412	AQUATIC HAZARD (LONG-TERM) - Category 3
<b>10X Ddel Restriction Enzyme</b> H320	EYE IRRITATION - Category 2B
<b>10X NlaIII Restriction Enzyme</b> H320	EYE IRRITATION - Category 2B
<b>10X HaeIII Restriction</b>	

## Section 2. Hazard identification

### Enzyme

H320

EYE IRRITATION - Category 2B

### GHS label elements

#### Hazard pictograms

: 60 mM EDTA



#### Signal word

:  PCR Master Mix No signal word.  
 10X PCR Primer Mix No signal word.  
 60 mM EDTA Warning  
 10X Ddel Buffer No signal word.  
 10X NlaIII/HaeIII Buffer No signal word.  
 100X BSA No signal word.  
 10X Ddel Restriction Enzyme Warning  
 10X NlaIII Restriction Enzyme Warning  
 10X HaeIII Restriction Enzyme Warning  
 Positive Control Salmon DNA No signal word.  
 Nuclease Free Water No signal word.

#### Hazard statements

:  PCR Master Mix No known significant effects or critical hazards.  
 10X PCR Primer Mix No known significant effects or critical hazards.  
 60 mM EDTA H373 - May cause damage to organs through prolonged or repeated exposure. (kidneys)  
 10X Ddel Buffer H412 - Harmful to aquatic life with long lasting effects.  
 10X NlaIII/HaeIII Buffer No known significant effects or critical hazards.  
 100X BSA No known significant effects or critical hazards.  
 10X Ddel Restriction Enzyme H320 - Causes eye irritation.  
 10X NlaIII Restriction Enzyme H320 - Causes eye irritation.  
 10X HaeIII Restriction Enzyme H320 - Causes eye irritation.  
 Positive Control Salmon DNA No known significant effects or critical hazards.  
 Nuclease Free Water No known significant effects or critical hazards.

### Precautionary statements

#### Prevention

:  PCR Master Mix Not applicable.  
 10X PCR Primer Mix Not applicable.  
 60 mM EDTA P260 - Do not breathe vapor.  
 10X Ddel Buffer P273 - Avoid release to the environment.  
 10X NlaIII/HaeIII Buffer Not applicable.  
 100X BSA Not applicable.  
 10X Ddel Restriction Enzyme Not applicable.  
 10X NlaIII Restriction Enzyme Not applicable.  
 10X HaeIII Restriction Enzyme Not applicable.  
 Positive Control Salmon DNA Not applicable.  
 Nuclease Free Water Not applicable.

#### Response

:  PCR Master Mix Not applicable.  
 10X PCR Primer Mix Not applicable.  
 60 mM EDTA P314 - Get medical advice or attention if you feel unwell.  
 10X Ddel Buffer Not applicable.  
 10X NlaIII/HaeIII Buffer Not applicable.  
 100X BSA Not applicable.  
 10X Ddel Restriction Enzyme P305 + P351 + P338 - IF IN EYES: Rinse cautiously

## Section 2. Hazard identification

	10X NlaIII Restriction Enzyme	with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	10X HaeIII Restriction Enzyme	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 advice or attention.
	Positive Control Salmon DNA Nuclease Free Water	Not applicable.
<b>Storage</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Not applicable.
	10X PCR Primer Mix	Not applicable.
	60 mM EDTA	Not applicable.
	10X Ddel Buffer	Not applicable.
	10X NlaIII/HaeIII Buffer	Not applicable.
	100X BSA	Not applicable.
	10X Ddel Restriction Enzyme	Not applicable.
	10X NlaIII Restriction Enzyme	Not applicable.
	10X HaeIII Restriction Enzyme	Not applicable.
	Positive Control Salmon DNA Nuclease Free Water	Not applicable.
<b>Disposal</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Not applicable.
	10X PCR Primer Mix	Not applicable.
	60 mM EDTA	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	10X Ddel Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	10X NlaIII/HaeIII Buffer	Not applicable.
	100X BSA	Not applicable.
	10X Ddel Restriction Enzyme	Not applicable.
	10X NlaIII Restriction Enzyme	Not applicable.
	10X HaeIII Restriction Enzyme	Not applicable.
	Positive Control Salmon DNA Nuclease Free Water	Not applicable.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> PCR Master Mix	None known.
	10X PCR Primer Mix	None known.
	60 mM EDTA	None known.
	10X Ddel Buffer	None known.
	10X NlaIII/HaeIII Buffer	None known.
	100X BSA	None known.
	10X Ddel Restriction Enzyme	None known.
	10X NlaIII Restriction Enzyme	None known.
	10X HaeIII Restriction Enzyme	None known.
	Positive Control Salmon DNA Nuclease Free Water	None known.

## Section 2. Hazard identification

	<input checked="" type="checkbox"/> 10X NlaIII/HaeIII Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 3.6%
	100X BSA	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1%
<b>Other hazards which do not result in classification</b>	<input checked="" type="checkbox"/> PCR Master Mix	None known.
	10X PCR Primer Mix	None known.
	60 mM EDTA	None known.
	10X Ddel Buffer	None known.
	10X NlaIII/HaeIII Buffer	None known.
	100X BSA	None known.
	10X Ddel Restriction Enzyme	None known.
	10X NlaIII Restriction Enzyme	None known.
	10X HaeIII Restriction Enzyme	None known.
	Positive Control Salmon DNA	None known.
	Nuclease Free Water	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	<input checked="" type="checkbox"/> PCR Master Mix	Mixture
	10X PCR Primer Mix	Mixture
	60 mM EDTA	Mixture
	10X Ddel Buffer	Mixture
	10X NlaIII/HaeIII Buffer	Mixture
	100X BSA	Mixture
	10X Ddel Restriction Enzyme	Mixture
	10X NlaIII Restriction Enzyme	Mixture
	10X HaeIII Restriction Enzyme	Mixture
	Positive Control Salmon DNA	Mixture
	Nuclease Free Water	Substance

Ingredient name	% (w/w)	CAS number
<input checked="" type="checkbox"/> PCR Master Mix		
Glycerol	0.1 - 1	56-81-5
Magnesium chloride	0.1 - 1	7786-30-3
<b>60 mM EDTA</b>		
Edetic acid	1 - 5	60-00-4
<b>10X Ddel Buffer</b>		
Sodium chloride	3 - 7	7647-14-5
Magnesium chloride	0.1 - 1	7786-30-3
<b>10X NlaIII/HaeIII Buffer</b>		
[2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]ammonium acetate	1 - 5	6850-28-8
<b>100X BSA</b>		
Glycerol	1 - 5	56-81-5
<b>10X Ddel Restriction Enzyme</b>		
Glycerol	30 - 60	56-81-5
<b>10X NlaIII Restriction Enzyme</b>		
Glycerol	30 - 60	56-81-5
Potassium chloride	0.5 - 1.5	7447-40-7
<b>10X HaeIII Restriction Enzyme</b>		

## Section 3. Composition/information on ingredients

Glycerol	30 - 60	56-81-5
Nuclease Free Water water	80 - 100	7732-18-5

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

<b>Eye contact</b>	: <input checked="" type="checkbox"/> PCR Master Mix	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.
	10X PCR Primer Mix	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.
	60 mM EDTA	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.
	10X Ddel Buffer	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.
	10X NlaIII/HaeIII Buffer	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.
	100X BSA	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.
	10X Ddel Restriction Enzyme	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. If irritation persists, get medical attention.
	10X NlaIII Restriction Enzyme	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. If irritation persists, get medical attention.
	10X HaeIII Restriction Enzyme	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. If irritation persists, get medical attention.
	Positve Control Salmon DNA	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.
	Nuclease Free Water	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

## Section 4. First-aid measures

### Inhalation

: 2X PCR Master Mix

Check for and remove any contact lenses. Get medical attention if irritation occurs.

10X PCR Primer Mix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

60 mM EDTA

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

10X Ddel Buffer

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. 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.

10X NlaIII/HaeIII Buffer

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 adverse health effects persist or are severe. 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.

100X BSA

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

10X Ddel Restriction Enzyme

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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 if adverse health effects persist or are severe. 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.

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	10X NlaIII Restriction Enzyme	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 adverse health effects persist or are severe. 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.
	10X HaeIII Restriction Enzyme	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 adverse health effects persist or are severe. 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.
	Positive Control Salmon DNA	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Nuclease Free Water	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: 2X PCR Master Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	10X PCR Primer Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	60 mM EDTA	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.
	10X DdeI Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	10X NlaIII/HaeIII Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100X BSA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	10X DdeI Restriction Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	10X NlaIII Restriction Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	10X HaeIII Restriction Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing

## Section 4. First-aid measures

### Ingestion

Positive Control Salmon DNA	before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Nuclease Free Water	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
:  PCR Master Mix	Wash out mouth with water. 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.
10X PCR Primer Mix	Wash out mouth with water. 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.
60 mM EDTA	Wash out mouth with water. Remove dentures if any. 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.
10X Ddel Buffer	Wash out mouth with water. Remove dentures if any. 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 adverse health effects persist or are severe. 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.
10X NlaIII/HaeIII Buffer	Wash out mouth with water. 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.
100X BSA	Wash out mouth with water. 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.
10X Ddel Restriction Enzyme	Wash out mouth with water. Remove dentures if any. 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

## Section 4. First-aid measures

10X NlaIII Restriction Enzyme	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 adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Wash out mouth with water. Remove dentures if any. 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 adverse health effects persist or are severe. 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.
10X HaeIII Restriction Enzyme	Wash out mouth with water. Remove dentures if any. 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 adverse health effects persist or are severe. 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.
Positive Control Salmon DNA	Wash out mouth with water. 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.
Nuclease Free Water	Wash out mouth with water. 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.

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

#### Potential acute health effects

<b>Eye contact</b>	: 2X PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme	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. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes eye irritation. Causes eye irritation.
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## Section 4. First-aid measures

	10X HaeIII Restriction Enzyme	Causes eye irritation.
	Positive Control Salmon DNA	No known significant effects or critical hazards.
	Nuclease Free Water	No known significant effects or critical hazards.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> PCR Master Mix	No known significant effects or critical hazards.
	10X PCR Primer Mix	No known significant effects or critical hazards.
	60 mM EDTA	No known significant effects or critical hazards.
	10X Ddel Buffer	No known significant effects or critical hazards.
	10X NlaIII/HaeIII Buffer	No known significant effects or critical hazards.
	100X BSA	No known significant effects or critical hazards.
	10X Ddel Restriction Enzyme	No known significant effects or critical hazards.
	10X NlaIII Restriction Enzyme	No known significant effects or critical hazards.
	10X HaeIII Restriction Enzyme	No known significant effects or critical hazards.
	Positive Control Salmon DNA	No known significant effects or critical hazards.
	Nuclease Free Water	No known significant effects or critical hazards.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> PCR Master Mix	No known significant effects or critical hazards.
	10X PCR Primer Mix	No known significant effects or critical hazards.
	60 mM EDTA	No known significant effects or critical hazards.
	10X Ddel Buffer	No known significant effects or critical hazards.
	10X NlaIII/HaeIII Buffer	No known significant effects or critical hazards.
	100X BSA	No known significant effects or critical hazards.
	10X Ddel Restriction Enzyme	No known significant effects or critical hazards.
	10X NlaIII Restriction Enzyme	No known significant effects or critical hazards.
	10X HaeIII Restriction Enzyme	No known significant effects or critical hazards.
	Positive Control Salmon DNA	No known significant effects or critical hazards.
	Nuclease Free Water	No known significant effects or critical hazards.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> PCR Master Mix	No known significant effects or critical hazards.
	10X PCR Primer Mix	No known significant effects or critical hazards.
	60 mM EDTA	No known significant effects or critical hazards.
	10X Ddel Buffer	No known significant effects or critical hazards.
	10X NlaIII/HaeIII Buffer	No known significant effects or critical hazards.
	100X BSA	No known significant effects or critical hazards.
	10X Ddel Restriction Enzyme	No known significant effects or critical hazards.
	10X NlaIII Restriction Enzyme	No known significant effects or critical hazards.
	10X HaeIII Restriction Enzyme	No known significant effects or critical hazards.
	Positive Control Salmon DNA	No known significant effects or critical hazards.
	Nuclease Free Water	No known significant effects or critical hazards.
<b><u>Over-exposure signs/symptoms</u></b>		
<b>Eye contact</b>	: <input checked="" type="checkbox"/> PCR Master Mix	No specific data.
	10X PCR Primer Mix	No specific data.
	60 mM EDTA	No specific data.
	10X Ddel Buffer	No specific data.
	10X NlaIII/HaeIII Buffer	No specific data.
	100X BSA	No specific data.
	10X Ddel Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness
	10X NlaIII Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness

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	10X HaeIII Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness
<b>Inhalation</b>	Positive Control Salmon DNA	No specific data.
	Nuclease Free Water	No specific data.
	: <input checked="" type="checkbox"/> PCR Master Mix	No specific data.
	10X PCR Primer Mix	No specific data.
	60 mM EDTA	No specific data.
	10X Ddel Buffer	No specific data.
	10X NlaIII/HaeIII Buffer	No specific data.
	100X BSA	No specific data.
	10X Ddel Restriction Enzyme	No specific data.
	10X NlaIII Restriction Enzyme	No specific data.
<b>Skin contact</b>	10X HaeIII Restriction Enzyme	No specific data.
	Positive Control Salmon DNA	No specific data.
	Nuclease Free Water	No specific data.
	: <input checked="" type="checkbox"/> PCR Master Mix	No specific data.
	10X PCR Primer Mix	No specific data.
	60 mM EDTA	No specific data.
	10X Ddel Buffer	No specific data.
	10X NlaIII/HaeIII Buffer	No specific data.
	100X BSA	No specific data.
	10X Ddel Restriction Enzyme	No specific data.
<b>Ingestion</b>	10X NlaIII Restriction Enzyme	No specific data.
	10X HaeIII Restriction Enzyme	No specific data.
	Positive Control Salmon DNA	No specific data.
	Nuclease Free Water	No specific data.
	: <input checked="" type="checkbox"/> PCR Master Mix	No specific data.
	10X PCR Primer Mix	No specific data.
	60 mM EDTA	No specific data.
	10X Ddel Buffer	No specific data.
	10X NlaIII/HaeIII Buffer	No specific data.
	100X BSA	No specific data.
10X Ddel Restriction Enzyme	No specific data.	
10X NlaIII Restriction Enzyme	No specific data.	
10X HaeIII Restriction Enzyme	No specific data.	
Positive Control Salmon DNA	No specific data.	
Nuclease Free Water	No specific data.	

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

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	10X PCR Primer Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	60 mM EDTA	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.
	10X Ddel Buffer	In case of inhalation of decomposition products in a

## Section 4. First-aid measures

	fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
10X NlaIII/HaeIII Buffer	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.
100X BSA	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.
10X Ddel Restriction Enzyme	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
10X NlaIII Restriction Enzyme	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
10X HaeIII Restriction Enzyme	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Positive Control Salmon DNA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Nuclease Free Water	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### Specific treatments

: <input checked="" type="checkbox"/> PCR Master Mix	No specific treatment.
10X PCR Primer Mix	No specific treatment.
60 mM EDTA	No specific treatment.
10X Ddel Buffer	No specific treatment.
10X NlaIII/HaeIII Buffer	No specific treatment.
100X BSA	No specific treatment.
10X Ddel Restriction Enzyme	No specific treatment.
10X NlaIII Restriction Enzyme	No specific treatment.
10X HaeIII Restriction Enzyme	No specific treatment.
Positive Control Salmon DNA	No specific treatment.
Nuclease Free Water	No specific treatment.

### Protection of first-aiders

: <input checked="" type="checkbox"/> PCR Master Mix	No action shall be taken involving any personal risk or without suitable training.
10X PCR Primer Mix	No action shall be taken involving any personal risk or without suitable training.
60 mM EDTA	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.
10X Ddel Buffer	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.
10X NlaIII/HaeIII Buffer	No action shall be taken involving any personal risk or without suitable training.
100X BSA	No action shall be taken involving any personal risk or without suitable training.
10X Ddel Restriction Enzyme	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.
10X NlaIII Restriction	No action shall be taken involving any personal risk

## Section 4. First-aid measures

Enzyme	or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
10X HaeIII Restriction Enzyme	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.
Positive Control Salmon DNA	No action shall be taken involving any personal risk or without suitable training.
Nuclease Free Water	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Use an extinguishing agent suitable for the surrounding fire.
	10X PCR Primer Mix	Use an extinguishing agent suitable for the surrounding fire.
	60 mM EDTA	Use an extinguishing agent suitable for the surrounding fire.
	10X Ddel Buffer	Use an extinguishing agent suitable for the surrounding fire.
	10X NlaIII/HaeIII Buffer	Use an extinguishing agent suitable for the surrounding fire.
	100X BSA	Use an extinguishing agent suitable for the surrounding fire.
	10X Ddel Restriction Enzyme	Use an extinguishing agent suitable for the surrounding fire.
	10X NlaIII Restriction Enzyme	Use an extinguishing agent suitable for the surrounding fire.
	10X HaeIII Restriction Enzyme	Use an extinguishing agent suitable for the surrounding fire.
	Positive Control Salmon DNA	Use an extinguishing agent suitable for the surrounding fire.
	Nuclease Free Water	Use an extinguishing agent suitable for the surrounding fire.

<b>Unsuitable extinguishing media</b>	: <input checked="" type="checkbox"/> PCR Master Mix	None known.
	10X PCR Primer Mix	None known.
	60 mM EDTA	None known.
	10X Ddel Buffer	None known.
	10X NlaIII/HaeIII Buffer	None known.
	100X BSA	None known.
	10X Ddel Restriction Enzyme	None known.
	10X NlaIII Restriction Enzyme	None known.
	10X HaeIII Restriction Enzyme	None known.
	Positive Control Salmon DNA	None known.
	Nuclease Free Water	None known.

## Section 5. Fire-fighting measures

<b>Specific hazards arising from the chemical</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	In a fire or if heated, a pressure increase will occur and the container may burst.		
		10X PCR Primer Mix	In a fire or if heated, a pressure increase will occur and the container may burst.		
		60 mM EDTA	In a fire or if heated, a pressure increase will occur and the container may burst.		
		10X Ddel Buffer	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.		
		10X NlaIII/HaeIII Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.		
		100X BSA	In a fire or if heated, a pressure increase will occur and the container may burst.		
		10X Ddel Restriction Enzyme	In a fire or if heated, a pressure increase will occur and the container may burst.		
		10X NlaIII Restriction Enzyme	In a fire or if heated, a pressure increase will occur and the container may burst.		
		10X HaeIII Restriction Enzyme	In a fire or if heated, a pressure increase will occur and the container may burst.		
		Positive Control Salmon DNA	In a fire or if heated, a pressure increase will occur and the container may burst.		
		Nuclease Free Water	In a fire or if heated, a pressure increase will occur and the container may burst.		
		<b>Hazardous thermal decomposition products</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
				10X PCR Primer Mix	No specific data.
60 mM EDTA	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides				
10X Ddel Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides				
10X NlaIII/HaeIII Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides				
100X BSA	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides				
10X Ddel Restriction Enzyme	Decomposition products may include the following materials: carbon dioxide carbon monoxide				
10X NlaIII Restriction	Decomposition products may include the following				

## Section 5. Fire-fighting measures

Enzyme	materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
10X HaeIII Restriction Enzyme	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Positive Control Salmon DNA Nuclease Free Water	No specific data. No specific data.
<b>Special protective actions for fire-fighters</b>	
: <input checked="" type="checkbox"/> PCR Master Mix	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.
10X PCR Primer Mix	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.
60 mM EDTA	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.
10X Ddel Buffer	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.
10X NlaIII/HaeIII Buffer	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.
100X BSA	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.
10X Ddel Restriction Enzyme	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.
10X NlaIII Restriction Enzyme	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.
10X HaeIII Restriction Enzyme	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.
Positive Control Salmon DNA	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.
Nuclease Free Water	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.

## Section 5. Fire-fighting measures

<b>Special protective equipment for fire-fighters</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X PCR Primer Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	60 mM EDTA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X Ddel Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X NlaIII/HaeIII Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	100X BSA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X Ddel Restriction Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X NlaIII Restriction Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X HaeIII Restriction Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Positive Control Salmon DNA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Nuclease Free Water	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

<b>For non-emergency personnel</b>	: <input checked="" type="checkbox"/> PCR Master Mix	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. Put on appropriate personal protective equipment.
	10X PCR Primer Mix	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. Put on appropriate personal protective equipment.

## Section 6. Accidental release measures

60 mM EDTA	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X Ddel Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X NlaIII/HaeIII Buffer	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. Put on appropriate personal protective equipment.
100X BSA	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. Put on appropriate personal protective equipment.
10X Ddel Restriction Enzyme	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X NlaIII Restriction Enzyme	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X HaeIII Restriction Enzyme	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Positive Control Salmon DNA	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. Put on appropriate personal protective equipment.
Nuclease Free Water	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding

## Section 6. Accidental release measures

**For emergency responders** :  PCR Master Mix

10X PCR Primer Mix

60 mM EDTA

10X Ddel Buffer

10X NlaIII/HaeIII Buffer

100X BSA

10X Ddel Restriction Enzyme

10X NlaIII Restriction Enzyme

10X HaeIII Restriction Enzyme

Positive Control Salmon DNA

Nuclease Free Water

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

If specialized 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".

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If specialized 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".

**Environmental precautions** :  PCR Master Mix

10X PCR Primer Mix

60 mM EDTA

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).

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Avoid dispersal of spilled material and runoff and

## Section 6. Accidental release measures

	contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X Ddel Buffer	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). Water polluting material. May be harmful to the environment if released in large quantities.
10X NlaIII/HaeIII Buffer	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).
100X BSA	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).
10X Ddel Restriction Enzyme	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).
10X NlaIII Restriction Enzyme	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).
10X HaeIII Restriction Enzyme	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).
Positive Control Salmon DNA	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).
Nuclease Free Water	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

**Methods for cleaning up** :  PCR Master Mix

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.

10X PCR Primer Mix

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 6. Accidental release measures

60 mM EDTA	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.
10X Ddel Buffer	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.
10X NlaIII/HaeIII Buffer	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.
100X BSA	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.
10X Ddel Restriction Enzyme	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.
10X NlaIII Restriction Enzyme	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.
10X HaeIII Restriction Enzyme	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.
Positive Control Salmon DNA	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.
Nuclease Free Water	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

<b>Protective measures</b>	: 2X PCR Master Mix	Put on appropriate personal protective equipment (see Section 8).
	10X PCR Primer Mix	Put on appropriate personal protective equipment (see Section 8).
	60 mM EDTA	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. 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.
	10X Ddel Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. 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.
	10X NlaIII/HaeIII Buffer	Put on appropriate personal protective equipment (see Section 8).
	100X BSA	Put on appropriate personal protective equipment (see Section 8).
	10X Ddel Restriction Enzyme	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
	10X NlaIII Restriction Enzyme	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
	10X HaeIII Restriction Enzyme	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
	Positive Control Salmon DNA	Put on appropriate personal protective equipment (see Section 8).
	Nuclease Free Water	Put on appropriate personal protective equipment (see Section 8).

## Section 7. Handling and storage

### Advice on general occupational hygiene

:  PCR Master Mix

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.

10X PCR Primer Mix

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.

60 mM EDTA

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.

10X Ddel Buffer

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.

10X NlaIII/HaeIII Buffer

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.

100X BSA

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.

10X Ddel Restriction Enzyme

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.

10X NlaIII Restriction Enzyme

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.

10X HaeIII Restriction Enzyme

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

## Section 7. Handling and storage

	<p>Positive Control Salmon DNA</p>	<p>contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. 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.</p>
	<p>Nuclease Free Water</p>	<p>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.</p>
<p><b>Conditions for safe storage, including any incompatibilities</b></p>	<p>: <input checked="" type="checkbox"/> PCR Master Mix</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. 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. See Section 10 for incompatible materials before handling or use.</p>
	<p>10X PCR Primer Mix</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. 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. See Section 10 for incompatible materials before handling or use.</p>
	<p>60 mM EDTA</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. 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. See Section 10 for incompatible materials before handling or use.</p>
	<p>10X Ddel Buffer</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. 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</p>

## Section 7. Handling and storage

10X NlaIII/HaeIII Buffer	<p>environmental contamination. See Section 10 for incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
100X BSA	<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. 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. See Section 10 for incompatible materials before handling or use.</p>
10X Ddel Restriction Enzyme	<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. 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. See Section 10 for incompatible materials before handling or use.</p>
10X NlaIII Restriction Enzyme	<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. 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. See Section 10 for incompatible materials before handling or use.</p>
10X HaeIII Restriction Enzyme	<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. 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. See Section 10 for incompatible materials before handling or use.</p>
Positive Control Salmon DNA	<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</p>

## Section 7. Handling and storage

Nuclease Free Water

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

## Section 8. Exposure controls/personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
<p><b>2X PCR Master Mix</b> Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>
<p><b>100X BSA</b> Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>
<p><b>10X Ddel Restriction Enzyme</b> Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b></p>

## Section 8. Exposure controls/personal protection

	<p>8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b>                  TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>                  STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b>                  TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>
<p><b>10X NlaIII Restriction Enzyme</b>                  Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>                  8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b>                  TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>                  STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b>                  TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>
<p><b>10X HaeIII Restriction Enzyme</b>                  Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>                  8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b>                  TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>                  STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b>                  TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>

**Appropriate engineering controls**

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**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.

## Section 8. Exposure controls/personal protection

- 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.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	Liquid.	
		10X PCR Primer Mix	Liquid.	
		60 mM EDTA	Liquid.	
		10X Ddel Buffer	Liquid.	
		10X NlaIII/HaeIII Buffer	Liquid.	
		100X BSA	Liquid.	
		10X Ddel Restriction Enzyme	Liquid.	
		10X NlaIII Restriction Enzyme	Liquid.	
		10X HaeIII Restriction Enzyme	Liquid.	
		Positive Control Salmon DNA	Liquid.	
		Nuclease Free Water	Liquid.	
	<b>Color</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	Not available.
			10X PCR Primer Mix	Not available.
			60 mM EDTA	Not available.
		10X Ddel Buffer	Not available.	
		10X NlaIII/HaeIII Buffer	Not available.	
		100X BSA	Not available.	
		10X Ddel Restriction Enzyme	Not available.	
		10X NlaIII Restriction Enzyme	Not available.	
		10X HaeIII Restriction Enzyme	Not available.	
		Positive Control Salmon DNA	Not available.	
		Nuclease Free Water	Colorless.	

## Section 9. Physical and chemical properties and safety characteristics

<b>Odor</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	Not available.	
		10X PCR Primer Mix	Not available.	
		60 mM EDTA	Not available.	
		10X Ddel Buffer	Not available.	
		10X NlaIII/HaeIII Buffer	Not available.	
		100X BSA	Not available.	
		10X Ddel Restriction Enzyme	Not available.	
		10X NlaIII Restriction Enzyme	Not available.	
		10X HaeIII Restriction Enzyme	Not available.	
		Positive Control Salmon DNA	Not available.	
		Nuclease Free Water	Odorless.	
	<b>Odor threshold</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	Not available.
			10X PCR Primer Mix	Not available.
		60 mM EDTA	Not available.	
		10X Ddel Buffer	Not available.	
		10X NlaIII/HaeIII Buffer	Not available.	
		100X BSA	Not available.	
		10X Ddel Restriction Enzyme	Not available.	
		10X NlaIII Restriction Enzyme	Not available.	
		10X HaeIII Restriction Enzyme	Not available.	
		Positive Control Salmon DNA	Not available.	
		Nuclease Free Water	Not available.	
<b>pH</b>		:	<input checked="" type="checkbox"/> PCR Master Mix	8.8
			10X PCR Primer Mix	8.8
		60 mM EDTA	8.8	
		10X Ddel Buffer	Not available.	
		10X NlaIII/HaeIII Buffer	Not available.	
		100X BSA	Not available.	
		10X Ddel Restriction Enzyme	Not available.	
		10X NlaIII Restriction Enzyme	Not available.	
		10X HaeIII Restriction Enzyme	Not available.	
		Positive Control Salmon DNA	Not available.	
		Nuclease Free Water	7	
	<b>Melting point/freezing point</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	0°C (32°F)
			10X PCR Primer Mix	0°C (32°F)
		60 mM EDTA	Not available.	
		10X Ddel Buffer	Not available.	
		10X NlaIII/HaeIII Buffer	Not available.	
		100X BSA	0°C (32°F)	
		10X Ddel Restriction Enzyme	Not available.	
		10X NlaIII Restriction Enzyme	Not available.	
		10X HaeIII Restriction Enzyme	Not available.	
		Positive Control Salmon DNA	0°C (32°F)	
		Nuclease Free Water	0°C (32°F)	

## Section 9. Physical and chemical properties and safety characteristics

**Boiling point, initial boiling point, and boiling range** :

2X PCR Master Mix	100°C (212°F)
10X PCR Primer Mix	100°C (212°F)
60 mM EDTA	Not available.
10X Ddel Buffer	Not available.
10X NlaIII/HaeIII Buffer	Not available.
100X BSA	100°C (212°F)
10X Ddel Restriction Enzyme	Not available.
10X NlaIII Restriction Enzyme	Not available.
10X HaeIII Restriction Enzyme	Not available.
Positve Control Salmon DNA Nuclease Free Water	100°C (212°F)

**Flash point** :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
<b>2X PCR Master Mix</b>						
Edetic acid (R*,R*) -1,4-Dimercaptobutane-2,3-diol	>100	>212	DIN 51758			
<b>60 mM EDTA</b>						
Edetic acid (R*,R*) -1,4-Dimercaptobutane-2,3-diol	>100	>212	DIN 51758			
<b>10X Ddel Buffer</b>						
(R*,R*) -1,4-Dimercaptobutane-2,3-diol	>110	>230				
<b>10X NlaIII/HaeIII Buffer</b>						
(R*,R*) -1,4-Dimercaptobutane-2,3-diol	>110	>230				
<b>100X BSA</b>						
Edetic acid	>100	>212	DIN 51758			
Glycerol				177	350.6	
<b>10X Ddel Restriction Enzyme</b>						
Edetic acid (R*,R*) -1,4-Dimercaptobutane-2,3-diol	>100	>212	DIN 51758			
<b>10X NlaIII Restriction Enzyme</b>						
Edetic acid (R*,R*) -1,4-Dimercaptobutane-2,3-diol	>100	>212	DIN 51758			

## Section 9. Physical and chemical properties and safety characteristics

<b>10X HaeIII Restriction Enzyme</b>						
2-Mercaptoethanol	74	165.2		74	165.2	
Edetic acid	>100	>212	DIN 51758			
<b>Positive Control Salmon DNA</b>						
Edetic acid	>100	>212	DIN 51758			

**Evaporation rate**

- :  PCR Master Mix Not available.
- 10X PCR Primer Mix Not available.
- 60 mM EDTA Not available.
- 10X Ddel Buffer Not available.
- 10X NlaIII/HaeIII Buffer Not available.
- 100X BSA Not available.
- 10X Ddel Restriction Enzyme Not available.
- 10X NlaIII Restriction Enzyme Not available.
- 10X HaeIII Restriction Enzyme Not available.
- Positive Control Salmon DNA Not available.
- Nuclease Free Water Not available.

**Flammability**

- :  PCR Master Mix Not applicable.
- 10X PCR Primer Mix Not applicable.
- 60 mM EDTA Not applicable.
- 10X Ddel Buffer Not applicable.
- 10X NlaIII/HaeIII Buffer Not applicable.
- 100X BSA Not applicable.
- 10X Ddel Restriction Enzyme Not applicable.
- 10X NlaIII Restriction Enzyme Not applicable.
- 10X HaeIII Restriction Enzyme Not applicable.
- Positive Control Salmon DNA Not applicable.
- Nuclease Free Water Not applicable.

**Lower and upper explosion limit/flammability limit**

- :  PCR Master Mix Not available.
- 10X PCR Primer Mix Not available.
- 60 mM EDTA Not available.
- 10X Ddel Buffer Not available.
- 10X NlaIII/HaeIII Buffer Not available.
- 100X BSA Not available.
- 10X Ddel Restriction Enzyme Not available.
- 10X NlaIII Restriction Enzyme Not available.
- 10X HaeIII Restriction Enzyme Not available.
- Positive Control Salmon DNA Not available.
- Nuclease Free Water Not available.

**Vapor pressure**

- :  PCR Master Mix Not available.
- 10X PCR Primer Mix Not available.
- 60 mM EDTA Not available.
- 10X Ddel Buffer Not available.
- 10X NlaIII/HaeIII Buffer Not available.
- 100X BSA Not available.
- 10X Ddel Restriction Enzyme Not available.
- 10X NlaIII Restriction Enzyme Not available.

## Section 9. Physical and chemical properties and safety characteristics

10X HaeIII Restriction Enzyme Not available.  
 Positve Control Salmon DNA Nuclease Free Water Not available.  
 3.2 kPa (23.8 mm Hg) [room temperature]  
 12.3 kPa (92.258 mm Hg) [50°C (122°F)]

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>2X PCR Master Mix</b>						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
<b>10X PCR Primer Mix</b>						
water	23.8	3.2		92.258	12.3	
<b>60 mM EDTA</b>						
water	23.8	3.2		92.258	12.3	
Edetic acid	0	0				
<b>10X Ddel Buffer</b>						
water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
<b>10X NlaIII/HaeIII Buffer</b>						
water	23.8	3.2		92.258	12.3	
potassium acetate	0.00000013	0.000000017				
<b>100X BSA</b>						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
<b>10X Ddel Restriction Enzyme</b>						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
<b>10X NlaIII Restriction Enzyme</b>						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
<b>10X HaeIII Restriction Enzyme</b>						
water	23.8	3.2		92.258	12.3	
2-Mercaptoethanol	0.98	0.13				

## Section 9. Physical and chemical properties and safety characteristics

<b>Positive Control Salmon DNA</b>						
water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	

**Relative vapor density**

- :  PCR Master Mix Not available.
- 10X PCR Primer Mix Not available.
- 60 mM EDTA Not available.
- 10X Ddel Buffer Not available.
- 10X NlaIII/HaeIII Buffer Not available.
- 100X BSA Not available.
- 10X Ddel Restriction Enzyme Not available.
- 10X NlaIII Restriction Enzyme Not available.
- 10X HaeIII Restriction Enzyme Not available.
- Positive Control Salmon DNA Not available.
- Nuclease Free Water 0.62 [Air = 1]

**Relative density**

- :  PCR Master Mix Not available.
- 10X PCR Primer Mix Not available.
- 60 mM EDTA Not available.
- 10X Ddel Buffer Not available.
- 10X NlaIII/HaeIII Buffer Not available.
- 100X BSA Not available.
- 10X Ddel Restriction Enzyme Not available.
- 10X NlaIII Restriction Enzyme Not available.
- 10X HaeIII Restriction Enzyme Not available.
- Positive Control Salmon DNA Not available.
- Nuclease Free Water 1

**Solubility**

- :  PCR Master Mix Easily soluble in the following materials: cold water and hot water.
- 10X PCR Primer Mix Easily soluble in the following materials: cold water and hot water.
- 60 mM EDTA Easily soluble in the following materials: cold water and hot water.
- 10X Ddel Buffer Easily soluble in the following materials: cold water and hot water.
- 10X NlaIII/HaeIII Buffer Easily soluble in the following materials: cold water and hot water.
- 100X BSA Easily soluble in the following materials: cold water and hot water.
- 10X Ddel Restriction Enzyme Soluble in the following materials: cold water and hot water.
- 10X NlaIII Restriction Enzyme Soluble in the following materials: cold water and hot water.
- 10X HaeIII Restriction Enzyme Soluble in the following materials: cold water and hot water.
- Positive Control Salmon DNA Easily soluble in the following materials: cold water and hot water.
- Nuclease Free Water Easily soluble in the following materials: cold water and hot water.

## Section 9. Physical and chemical properties and safety characteristics

**Partition coefficient: n-octanol/water** :

2X PCR Master Mix	Not applicable.
10X PCR Primer Mix	Not applicable.
60 mM EDTA	Not applicable.
10X Ddel Buffer	Not applicable.
10X NlaIII/HaeIII Buffer	Not applicable.
100X BSA	Not applicable.
10X Ddel Restriction Enzyme	Not applicable.
10X NlaIII Restriction Enzyme	Not applicable.
10X HaeIII Restriction Enzyme	Not applicable.
Positive Control Salmon DNA	Not applicable.
Nuclease Free Water	-1.38

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
<b>2X PCR Master Mix</b>			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
<b>60 mM EDTA</b>			
Edetic acid	>400	>752	VDI 2263
<b>10X NlaIII/HaeIII Buffer</b>			
Magnesium di(acetate)	310	590	EU A.16
potassium acetate	>410	>770	EU A.16
<b>100X BSA</b>			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
<b>10X Ddel Restriction Enzyme</b>			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
<b>10X NlaIII Restriction Enzyme</b>			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
<b>10X HaeIII Restriction Enzyme</b>			
2-Mercaptoethanol	295	563	
Glycerol	370	698	
<b>Positive Control Salmon DNA</b>			
Edetic acid	>400	>752	VDI 2263

## Section 9. Physical and chemical properties and safety characteristics

<b>Decomposition temperature</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Not available.
	10X PCR Primer Mix	Not available.
	60 mM EDTA	Not available.
	10X Ddel Buffer	Not available.
	10X NlaIII/HaeIII Buffer	Not available.
	100X BSA	Not available.
	10X Ddel Restriction Enzyme	Not available.
	10X NlaIII Restriction Enzyme	Not available.
	10X HaeIII Restriction Enzyme	Not available.
	Positive Control Salmon DNA	Not available.
	Nuclease Free Water	Not available.

<b>Viscosity</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Not available.
	10X PCR Primer Mix	Not available.
	60 mM EDTA	Not available.
	10X Ddel Buffer	Not available.
	10X NlaIII/HaeIII Buffer	Not available.
	100X BSA	Not available.
	10X Ddel Restriction Enzyme	Not available.
	10X NlaIII Restriction Enzyme	Not available.
	10X HaeIII Restriction Enzyme	Not available.
	Positive Control Salmon DNA	Not available.
	Nuclease Free Water	Not available.

### Particle characteristics

<b>Median particle size</b>	: <input checked="" type="checkbox"/> PCR Master Mix	Not applicable.
	10X PCR Primer Mix	Not applicable.
	60 mM EDTA	Not applicable.
	10X Ddel Buffer	Not applicable.
	10X NlaIII/HaeIII Buffer	Not applicable.
	100X BSA	Not applicable.
	10X Ddel Restriction Enzyme	Not applicable.
	10X NlaIII Restriction Enzyme	Not applicable.
	10X HaeIII Restriction Enzyme	Not applicable.
	Positive Control Salmon DNA	Not applicable.
	Nuclease Free Water	Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: <input checked="" type="checkbox"/> PCR Master Mix	No specific test data related to reactivity available for this product or its ingredients.
	10X PCR Primer Mix	No specific test data related to reactivity available for this product or its ingredients.
	60 mM EDTA	No specific test data related to reactivity available for this product or its ingredients.
	10X Ddel Buffer	No specific test data related to reactivity available for this product or its ingredients.
	10X NlaIII/HaeIII Buffer	No specific test data related to reactivity available for this product or its ingredients.
	100X BSA	No specific test data related to reactivity available for this product or its ingredients.
	10X Ddel Restriction Enzyme	No specific test data related to reactivity available for this product or its ingredients.
	10X NlaIII Restriction	No specific test data related to reactivity available for

## Section 10. Stability and reactivity

Enzyme	this product or its ingredients.
10X HaeIII Restriction Enzyme	No specific test data related to reactivity available for this product or its ingredients.
Positve Control Salmon DNA	No specific test data related to reactivity available for this product or its ingredients.
Nuclease Free Water	No specific test data related to reactivity available for this product or its ingredients.

### Chemical stability

: <input checked="" type="checkbox"/> PCR Master Mix	The product is stable.
10X PCR Primer Mix	The product is stable.
60 mM EDTA	The product is stable.
10X Ddel Buffer	The product is stable.
10X NlaIII/HaeIII Buffer	The product is stable.
100X BSA	The product is stable.
10X Ddel Restriction Enzyme	The product is stable.
10X NlaIII Restriction Enzyme	The product is stable.
10X HaeIII Restriction Enzyme	The product is stable.
Positve Control Salmon DNA	The product is stable.
Nuclease Free Water	The product is stable.

### Possibility of hazardous reactions

: <input checked="" type="checkbox"/> PCR Master Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
10X PCR Primer Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
60 mM EDTA	Under normal conditions of storage and use, hazardous reactions will not occur.
10X Ddel Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
10X NlaIII/HaeIII Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
100X BSA	Under normal conditions of storage and use, hazardous reactions will not occur.
10X Ddel Restriction Enzyme	Under normal conditions of storage and use, hazardous reactions will not occur.
10X NlaIII Restriction Enzyme	Under normal conditions of storage and use, hazardous reactions will not occur.
10X HaeIII Restriction Enzyme	Under normal conditions of storage and use, hazardous reactions will not occur.
Positve Control Salmon DNA	Under normal conditions of storage and use, hazardous reactions will not occur.
Nuclease Free Water	Under normal conditions of storage and use, hazardous reactions will not occur.

### Conditions to avoid

: <input checked="" type="checkbox"/> PCR Master Mix	No specific data.
10X PCR Primer Mix	No specific data.
60 mM EDTA	No specific data.
10X Ddel Buffer	No specific data.
10X NlaIII/HaeIII Buffer	No specific data.
100X BSA	No specific data.
10X Ddel Restriction Enzyme	No specific data.
10X NlaIII Restriction Enzyme	No specific data.
10X HaeIII Restriction Enzyme	No specific data.
Positve Control Salmon DNA	No specific data.
Nuclease Free Water	No specific data.

## Section 10. Stability and reactivity

<b>Incompatible materials</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.
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<b>Hazardous decomposition products</b>	: <input checked="" type="checkbox"/> PCR Master Mix  10X PCR Primer Mix  60 mM EDTA  10X Ddel Buffer  10X NlaIII/HaeIII Buffer  100X BSA  10X Ddel Restriction Enzyme  10X NlaIII Restriction Enzyme  10X HaeIII Restriction Enzyme  Positive Control Salmon DNA  Nuclease Free Water	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. 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. 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.
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## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
<b>2X PCR Master Mix</b> Glycerol Magnesium chloride	LD50 Oral LD50 Dermal  LD50 Oral	Rat Rat - Male, Female Rat	12600 mg/kg >2000 mg/kg  2800 mg/kg	- - -
<b>10X Ddel Buffer</b> Sodium chloride Magnesium chloride	LD50 Oral LD50 Dermal  LD50 Oral	Rat Rat - Male, Female Rat	3000 mg/kg >2000 mg/kg  2800 mg/kg	- - -
<b>100X BSA</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>10X Ddel Restriction Enzyme</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>10X NlaIII Restriction Enzyme</b> Glycerol Potassium chloride	LD50 Oral LD50 Oral	Rat Rat	12600 mg/kg 2600 mg/kg	- -
<b>10X HaeIII Restriction Enzyme</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>2X PCR Master Mix</b> Glycerol	Eyes - Mild irritant  Skin - Mild irritant	Rabbit  Rabbit	-  -	24 hours 500 mg  24 hours 500 mg	-  -
<b>10X Ddel Buffer</b> Sodium chloride	Eyes - Moderate irritant  Eyes - Moderate irritant Skin - Mild irritant	Rabbit  Rabbit Rabbit	-  - -	24 hours 100 mg  10 mg 24 hours 500 mg	-  - -
<b>100X BSA</b> Glycerol	Eyes - Mild irritant  Skin - Mild irritant	Rabbit  Rabbit	-  -	24 hours 500 mg  24 hours 500 mg	-  -
<b>10X Ddel Restriction Enzyme</b> Glycerol	Eyes - Mild irritant  Skin - Mild irritant	Rabbit  Rabbit	-  -	24 hours 500 mg  24 hours 500 mg	-  -
<b>10X NlaIII Restriction</b>					

## Section 11. Toxicological information

<b>Enzyme</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>10X HaeIII Restriction Enzyme</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

### Sensitization

Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>10X NlaIII/HaeIII Buffer</b> [2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]ammonium acetate	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
<b>60 mM EDTA</b> Edetic acid	Category 2	-	kidneys

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

<input checked="" type="checkbox"/> 2X PCR Master Mix	Not available.
10X PCR Primer Mix	Not available.
60 mM EDTA	Routes of entry anticipated: Oral, Dermal, Inhalation.
10X Ddel Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
10X NlaIII/HaeIII Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
100X BSA	Not available.
10X Ddel Restriction Enzyme	Routes of entry anticipated: Oral, Dermal, Inhalation.
10X NlaIII Restriction Enzyme	Routes of entry anticipated: Oral, Dermal, Inhalation.
10X HaeIII Restriction Enzyme	Routes of entry anticipated: Oral, Dermal, Inhalation.
Positive Control Salmon DNA	Not available.
Nuclease Free Water	Not available.

## Section 11. Toxicological information

### Potential acute health effects

<b>Eye contact</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes eye irritation. Causes eye irritation. Causes eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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

## Section 11. Toxicological information

<b>Eye contact</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	No specific data.
		10X PCR Primer Mix	No specific data.
		60 mM EDTA	No specific data.
		10X Ddel Buffer	No specific data.
		10X NlaIII/HaeIII Buffer	No specific data.
		100X BSA	No specific data.
		10X Ddel Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness
		10X NlaIII Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness
		10X HaeIII Restriction Enzyme	Adverse symptoms may include the following: irritation watering redness
		Positive Control Salmon DNA Nuclease Free Water	No specific data.
<b>Inhalation</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	No specific data.
		10X PCR Primer Mix	No specific data.
		60 mM EDTA	No specific data.
		10X Ddel Buffer	No specific data.
		10X NlaIII/HaeIII Buffer	No specific data.
		100X BSA	No specific data.
		10X Ddel Restriction Enzyme	No specific data.
		10X NlaIII Restriction Enzyme	No specific data.
		10X HaeIII Restriction Enzyme	No specific data.
		Positive Control Salmon DNA Nuclease Free Water	No specific data.
<b>Skin contact</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	No specific data.
		10X PCR Primer Mix	No specific data.
		60 mM EDTA	No specific data.
		10X Ddel Buffer	No specific data.
		10X NlaIII/HaeIII Buffer	No specific data.
		100X BSA	No specific data.
		10X Ddel Restriction Enzyme	No specific data.
		10X NlaIII Restriction Enzyme	No specific data.
		10X HaeIII Restriction Enzyme	No specific data.
		Positive Control Salmon DNA Nuclease Free Water	No specific data.
<b>Ingestion</b>	:	<input checked="" type="checkbox"/> PCR Master Mix	No specific data.
		10X PCR Primer Mix	No specific data.
		60 mM EDTA	No specific data.
		10X Ddel Buffer	No specific data.
		10X NlaIII/HaeIII Buffer	No specific data.
		100X BSA	No specific data.
		10X Ddel Restriction Enzyme	No specific data.
		10X NlaIII Restriction Enzyme	No specific data.
		10X HaeIII Restriction Enzyme	No specific data.
		Positive Control Salmon DNA Nuclease Free Water	No specific data.

## Section 11. Toxicological information

Positive Control Salmon DNA No specific data.  
 Nuclease Free Water No specific data.

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA  10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	No known significant effects or critical hazards. No known significant effects or critical hazards. May cause damage to organs through prolonged or repeated exposure. 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. 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. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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<b>Reproductive toxicity</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer 10X NlaIII/HaeIII Buffer 100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction Enzyme 10X HaeIII Restriction Enzyme Positive Control Salmon DNA Nuclease Free Water	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. 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. 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. No known significant effects or critical hazards.
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### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b><input checked="" type="checkbox"/> PCR Master Mix</b>					
Glycerol	12600	N/A	N/A	N/A	N/A
Magnesium chloride	2800	2500	N/A	N/A	N/A
<b>10X Ddel Buffer</b>					
10X Ddel Buffer	43659	250000	N/A	N/A	N/A
Sodium chloride	3000	N/A	N/A	N/A	N/A
Magnesium chloride	2800	2500	N/A	N/A	N/A
<b>10X NlaIII/HaeIII Buffer</b>					
10X NlaIII/HaeIII Buffer	65000	N/A	N/A	N/A	N/A
<b>100X BSA</b>					
Glycerol	12600	N/A	N/A	N/A	N/A
<b>10X Ddel Restriction Enzyme</b>					
Glycerol	12600	N/A	N/A	N/A	N/A
<b>10X NlaIII Restriction Enzyme</b>					
10X NlaIII Restriction Enzyme	173333.3	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
<b>10X HaeIII Restriction Enzyme</b>					
Glycerol	12600	N/A	N/A	N/A	N/A

<b>Other information</b>	: <input checked="" type="checkbox"/> PCR Master Mix 10X PCR Primer Mix 60 mM EDTA 10X Ddel Buffer  10X NlaIII/HaeIII Buffer  100X BSA 10X Ddel Restriction Enzyme 10X NlaIII Restriction	Not available. Not available. Not available. Adverse symptoms may include the following: May cause skin sensitization. Adverse symptoms may include the following: May cause skin sensitization. Not available. Not available. Not available.
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## Section 11. Toxicological information

Enzyme	
10X HaeIII Restriction	Not available.
Enzyme	
Positive Control Salmon DNA	Not available.
Nuclease Free Water	Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>2X PCR Master Mix</b>			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 180000 µg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - Daphnia hyalina - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days
<b>60 mM EDTA</b>			
Edetic acid	Acute EC50 113000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 41000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
<b>10X Ddel Buffer</b>			
Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 180000 µg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - Daphnia hyalina - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days
<b>100X BSA</b>			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

## Section 12. Ecological information

<b>10X Ddel Restriction Enzyme</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>10X NlaIII Restriction Enzyme</b> Glycerol Potassium chloride	Acute LC50 54000 mg/l Fresh water Acute EC50 1337000 µg/l Fresh water Acute EC50 9.24 g/L Fresh water  Acute EC50 83000 µg/l Fresh water Acute LC50 9.68 mg/l Fresh water  Acute LC50 509.65 mg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Navicula seminulum Algae - Desmodesmus subspicatus Daphnia - Daphnia magna Crustaceans - Pseudosida ramosa - Neonate Fish - Danio rerio	96 hours 96 hours 72 hours  48 hours 48 hours 96 hours
<b>10X HaeIII Restriction Enzyme</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>2X PCR Master Mix</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>100X BSA</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>10X Ddel Restriction Enzyme</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>10X NlaIII Restriction Enzyme</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>10X HaeIII Restriction Enzyme</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

## Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>60 mM EDTA</b> Edetic acid	-	-	Not readily
<b>10X NlaIII Restriction Enzyme</b> Potassium chloride	-	-	Readily
<b>Nuclease Free Water</b> water	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>2X PCR Master Mix</b> Glycerol	-1.76	-	low
<b>60 mM EDTA</b> Edetic acid	-3.86	1.8	low
<b>100X BSA</b> Glycerol	-1.76	-	low
<b>10X DdeI Restriction Enzyme</b> Glycerol	-1.76	-	low
<b>10X NlaIII Restriction Enzyme</b> Glycerol	-1.76	-	low
<b>10X NlaIII Restriction Enzyme</b> Potassium chloride	-0.46	-	low
<b>10X HaeIII Restriction Enzyme</b> Glycerol	-1.76	-	low
<b>Nuclease Free Water</b> water	-1.38	-	low

### Mobility in soil

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

**Other adverse effects** : 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

## Section 13. Disposal considerations

containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

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

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### International regulations

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

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

**Europe** : All components are listed or exempted.

**Japan** : **Japan inventory (CSCL):** Not determined.  
**Japan inventory (ISHL):** Not determined.

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

**Taiwan** : All components are listed or exempted.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** :  All components are active or exempted.

**Viet Nam** : Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 03/27/2022

**Date of previous issue** : 07/29/2019

**Version** : 5

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- HPR = Hazardous Products Regulations
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<b>60 mM EDTA</b> SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
<b>10X Ddel Buffer</b> AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
<b>10X Ddel Restriction Enzyme</b> EYE IRRITATION - Category 2B	Calculation method
<b>10X NlaIII Restriction Enzyme</b> EYE IRRITATION - Category 2B	Calculation method
<b>10X HaeIII Restriction Enzyme</b> EYE IRRITATION - Category 2B	Calculation method

**References** : Not available.

✓ 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.