

SAFETY DATA SHEET



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

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

1.1 Product identifier

Product name	: PCR-RFLP Fish Species ID Kit, Part Number 5500-0001	
CAS number	: <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	7732-18-5
Part no. (chemical kit)	: 5500-0001	
Part no.	: <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

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

Material uses	: 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

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
 5500 Lakeside Cheadle Royal Business Park,
 Cheadle, Cheshire, SK8 3GR
 United Kingdom
 Tel: +44 (0) 345 712 5292

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

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	:	<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	Mono-constituent substance

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

10X Ddel Buffer

H412 LONG-TERM (CHRONIC) AQUATIC HAZARD Category 3

Ingredients of unknown toxicity	:	<input checked="" type="checkbox"/> PCR Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
		10X Ddel Buffer	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
		10X NlaIII/HaeIII Buffer	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 10 - 30%
			Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
		100X BSA	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10%
			Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
			Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
		10X Ddel Restriction Enzyme	Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10%
		10X NlaIII Restriction Enzyme	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
			Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
			Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
		10X HaeIII Restriction Enzyme	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
Ingredients of unknown ecotoxicity	:	<input checked="" type="checkbox"/> 10X NlaIII/HaeIII Buffer	Contains 3.6% of components with unknown hazards to the aquatic environment
		100X BSA	Contains 1% of components with unknown hazards to the aquatic environment

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

SECTION 2: Hazards identification

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

2.2 Label elements

Signal word	:	<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 signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word.
Hazard statements	:	<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. H412 - Harmful to aquatic life with long lasting effects. 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.
<u>Precautionary statements</u>			
Prevention	:	<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	Not applicable. Not applicable. Not applicable. P273 - Avoid release to the environment. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Response	:	<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	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

SECTION 2: Hazards identification

	Enzyme	
	Positive Control Salmon	Not applicable.
	DNA	
	Nuclease Free Water	Not applicable.
Storage	: <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	Not applicable.
	Enzyme	
	10X NlaIII Restriction	Not applicable.
	Enzyme	
	10X HaeIII Restriction	Not applicable.
	Enzyme	
	Positive Control Salmon	Not applicable.
	DNA	
	Nuclease Free Water	Not applicable.
Disposal	: <input checked="" type="checkbox"/> PCR Master Mix	Not applicable.
	10X PCR Primer Mix	Not applicable.
	60 mM EDTA	Not applicable.
	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	Not applicable.
	Enzyme	
	10X NlaIII Restriction	Not applicable.
	Enzyme	
	10X HaeIII Restriction	Not applicable.
	Enzyme	
	Positive Control Salmon	Not applicable.
	DNA	
	Nuclease Free Water	Not applicable.
Hazardous ingredients	: <input checked="" type="checkbox"/> 60 mM EDTA	Not applicable.
	10X Ddel Buffer	Not applicable.
	10X NlaIII/HaeIII Buffer	Not applicable.
Supplemental label elements	: <input checked="" type="checkbox"/> PCR Master Mix	Not applicable.
	10X PCR Primer Mix	Not applicable.
	60 mM EDTA	Safety data sheet available on request.
	10X Ddel Buffer	Not applicable.
	10X NlaIII/HaeIII Buffer	Safety data sheet available on request.
	100X BSA	Not applicable.
	10X Ddel Restriction	Not applicable.
	Enzyme	
	10X NlaIII Restriction	Not applicable.
	Enzyme	
	10X HaeIII Restriction	Contains 2-mercaptoethanol. May produce an allergic reaction. Safety data sheet available on request.
	Enzyme	
	Positive Control Salmon	Not applicable.
	DNA	
	Nuclease Free Water	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: <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	Not applicable.
	Enzyme	
	10X NlaIII Restriction	Not applicable.

SECTION 2: Hazards identification

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

Special packaging requirements

Tactile warning of danger : 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 Not applicable.
 Enzyme
 10X NlaIII Restriction Not applicable.
 Enzyme
 10X HaeIII Restriction Not applicable.
 Enzyme
 Positive Control Salmon Not applicable.
 DNA
 Nuclease Free Water Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

	PBT	P	B	T	vPvB	vP	vB
Nuclease Free Water Not applicable (Inorganic)		N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

PCR Master Mix This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X PCR Primer Mix This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 60 mM EDTA This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X Ddel Buffer This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X NlaIII/HaeIII Buffer This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 100X BSA This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X Ddel Restriction Enzyme This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X NlaIII Restriction Enzyme This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 10X HaeIII Restriction Enzyme This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 Positive Control Salmon DNA This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification :

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.

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

SECTION 2: Hazards identification

Enzyme
 Positive Control Salmon None known.
 DNA
 Nuclease Free Water None known.

SECTION 3: Composition/information on ingredients

3.1 Substances : 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 Mono-constituent substance

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<input checked="" type="checkbox"/> PCR Master Mix Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≤3	Not classified.	[2]
60 mM EDTA Edetic acid	EC: 200-449-4 CAS: 60-00-4 Index: 607-429-00-8	≤3	Eye Irrit. 2, H319	[1]
10X Ddel Buffer Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	<10	Eye Irrit. 2, H319	[1]
Magnesium chloride	EC: 232-094-6 CAS: 7786-30-3	<2.5	Aquatic Chronic 1, H410 (M=1)	[1]
10X NlaIII/HaeIII Buffer [2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]ammonium acetate	EC: 229-939-6 CAS: 6850-28-8	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
100X BSA Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≤10	Not classified.	[2]
10X Ddel Restriction Enzyme Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
10X NlaIII Restriction Enzyme Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
10X HaeIII Restriction Enzyme Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
Nuclease Free Water water	REACH #: Annex IV	100	Not classified.	[A]

SECTION 3: Composition/information on ingredients

	EC: 231-791-2 CAS: 7732-18-5		See Section 16 for the full text of the H statements declared above.
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There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: <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. Get medical attention if irritation occurs.
	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. Get medical attention if irritation occurs.
	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. Get medical attention if irritation occurs.
	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. Get medical attention if irritation occurs.
	Positive 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. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: <input checked="" type="checkbox"/> PCR Master Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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. In case of inhalation of decomposition

SECTION 4: First aid measures

		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	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.
	10X NlaIII/HaeIII Buffer	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.
	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.
	10X NlaIII Restriction Enzyme	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	10X HaeIII Restriction Enzyme	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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.
Skin contact	: 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. Get medical attention if symptoms occur.
	10X Ddel 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 Ddel Restriction Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if

SECTION 4: First aid measures

Ingestion

10X NlaIII Restriction Enzyme	symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
10X HaeIII Restriction Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Positive Control Salmon DNA	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.
: 2X 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. 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 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. 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 NlaIII Restriction Enzyme	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 HaeIII Restriction Enzyme	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

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	Positive Control Salmon DNA	symptoms occur. 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.
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.
	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.
	10X NlaIII Restriction Enzyme	No action shall be taken involving any personal risk or without suitable training.
	10X HaeIII Restriction Enzyme	No action shall be taken involving any personal risk or without suitable training.
	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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	<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.
Inhalation	<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.

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	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.
Skin contact	: <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.
Ingestion	: <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.

Over-exposure signs/symptoms

Eye contact	: <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.
Inhalation	: <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.

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	Positive Control Salmon DNA	No specific data.
	Nuclease Free Water	No specific data.
Skin contact	: <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.
Ingestion	: <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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: <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 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.

SECTION 4: First aid measures

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: <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.

Unsuitable extinguishing media	: <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.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: <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

SECTION 5: Firefighting measures

	100X BSA	container may burst. 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.
Hazardous combustion products	: <input checked="" type="checkbox"/> PCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10X PCR Primer Mix 60 mM EDTA	No specific data. 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 Enzyme	Decomposition products may include the following 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	No specific data.
	Nuclease Free Water	No specific data.

5.3 Advice for firefighters

Special precautions for fire-fighters	: <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

SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

10X Ddel Buffer	vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
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.
: <input checked="" type="checkbox"/> 2X 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10X Ddel Restriction Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

SECTION 5: Firefighting measures

10X NlaIII Restriction Enzyme	face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: <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 spilt 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 spilt material. Put on appropriate personal protective equipment.
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 spilt material. 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 spilt material. Avoid breathing vapour 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 spilt 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 spilt material. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

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 spilt material. 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 spilt material. 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 spilt material. 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 spilt 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 areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders : <input checked="" type="checkbox"/> 2X PCR Master Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X PCR Primer Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
60 mM EDTA	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X Ddel Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X NlaIII/HaeIII Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
100X BSA	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X Ddel Restriction Enzyme	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X NlaIII Restriction Enzyme	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X HaeIII Restriction Enzyme	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Positive Control Salmon DNA	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-

SECTION 6: Accidental release measures

6.2 Environmental precautions

Nuclease Free Water	emergency personnel". If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
: <input checked="" type="checkbox"/> PCR Master Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X PCR Primer Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
60 mM EDTA	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X Ddel Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
10X NlaIII/HaeIII Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
100X BSA	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X Ddel Restriction Enzyme	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X NlaIII Restriction Enzyme	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X HaeIII Restriction Enzyme	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Positive Control Salmon DNA	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Nuclease Free Water	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : <input checked="" type="checkbox"/> 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

SECTION 6: Accidental release measures

60 mM EDTA	of via a licensed waste disposal contractor. 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.

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: <input checked="" type="checkbox"/> 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).
	10X Ddel Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an

SECTION 7: Handling and storage

Advice on general occupational hygiene

		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).
	10X NlaIII Restriction Enzyme	Put on appropriate personal protective equipment (see Section 8).
	10X HaeIII Restriction Enzyme	Put on appropriate personal protective equipment (see Section 8).
	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).
	<input checked="" type="checkbox"/> 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

SECTION 7: Handling and storage

10X HaeIII Restriction Enzyme	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.
Positive Control Salmon DNA	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.
Nuclease Free Water	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

: <input checked="" type="checkbox"/> PCR Master Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
10X PCR Primer Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
60 mM EDTA	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
10X Ddel Buffer	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
10X NlaIII/HaeIII Buffer	Store in accordance with local regulations. Store in original

SECTION 7: Handling and storage

100X BSA	<p>container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
10X DdeI 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 unlabelled 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 unlabelled 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 unlabelled 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 incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
Nuclease Free Water	<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</p>

SECTION 7: Handling and storage

been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations

: <input checked="" type="checkbox"/> PCR Master Mix	Industrial applications, Professional applications.
10X PCR Primer Mix	Industrial applications, Professional applications.
60 mM EDTA	Industrial applications, Professional applications.
10X Ddel Buffer	Industrial applications, Professional applications.
10X NlaIII/HaeIII Buffer	Industrial applications, Professional applications.
100X BSA	Industrial applications, Professional applications.
10X Ddel Restriction Enzyme	Industrial applications, Professional applications.
10X NlaIII Restriction Enzyme	Industrial applications, Professional applications.
10X HaeIII Restriction Enzyme	Industrial applications, Professional applications.
Positive Control Salmon DNA	Industrial applications, Professional applications.
Nuclease Free Water	Industrial applications, Professional applications.

Industrial sector specific solutions

: <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.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
<input checked="" type="checkbox"/> PCR Master Mix Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
100X BSA Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
10X Ddel Restriction Enzyme Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
10X NlaIII Restriction Enzyme Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
10X HaeIII Restriction Enzyme	

SECTION 8: Exposure controls/personal protection

Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
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Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
50 mM EDTA Edetic acid	DNEL	Long term Inhalation	0.6 mg/m ³	General population	Local
	DNEL	Short term Inhalation	1.2 mg/m ³	General population	Local
	DNEL	Long term Inhalation	1.5 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	3 mg/m ³	Workers	Local
	DNEL	Long term Oral	25 mg/kg bw/day	General population	Systemic
10X Ddel Buffer Sodium chloride	DNEL	Short term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	2068.62 mg/m ³	Workers	Systemic
Magnesium chloride	DNEL	Long term Oral	7 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

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

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- 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.
- 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.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	<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.		
		Colour	:	<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.				

SECTION 9: Physical and chemical properties

	Enzyme	
	Positive Control Salmon	Not available.
	DNA	
	Nuclease Free Water	Colourless.
Odour	: <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	Not available.
	Enzyme	
	10X NlaIII Restriction	Not available.
	Enzyme	
	10X HaeIII Restriction	Not available.
	Enzyme	
	Positive Control Salmon	Not available.
	DNA	
	Nuclease Free Water	Odourless.
Odour threshold	: <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	Not available.
	Enzyme	
	10X NlaIII Restriction	Not available.
	Enzyme	
	10X HaeIII Restriction	Not available.
	Enzyme	
	Positive Control Salmon	Not available.
	DNA	
	Nuclease Free Water	Not available.
Melting point/freezing point	: <input checked="" type="checkbox"/> PCR Master Mix	0°C
	10X PCR Primer Mix	0°C
	60 mM EDTA	Not available.
	10X Ddel Buffer	Not available.
	10X NlaIII/HaeIII Buffer	Not available.
	100X BSA	0°C
	10X Ddel Restriction	Not available.
	Enzyme	
	10X NlaIII Restriction	Not available.
	Enzyme	
	10X HaeIII Restriction	Not available.
	Enzyme	
	Positive Control Salmon	0°C
	DNA	
	Nuclease Free Water	0°C
Initial boiling point and boiling range	: <input checked="" type="checkbox"/> 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	Not available.
	Enzyme	
	10X NlaIII Restriction	Not available.
	Enzyme	
	10X HaeIII Restriction	Not available.
	Enzyme	
	Positive Control Salmon	100°C (212°F)
	DNA	

SECTION 9: Physical and chemical properties

- Flammability (solid, gas) :** Nuclease Free Water 100°C (212°F)
 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.
- Upper/lower flammability or explosive limits :** Nuclease Free Water Not applicable.
 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.


Flash point :

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

SECTION 9: Physical and chemical properties

Edetic acid	>100	>212	DIN 51758		
(R*,R*) -1,4-Dimercaptobutane- 2,3-diol	>110	>230			
10X NlaIII Restriction Enzyme					
Edetic acid	>100	>212	DIN 51758		
(R*,R*) -1,4-Dimercaptobutane- 2,3-diol	>110	>230			
10X HaeIII Restriction Enzyme					
2-Mercaptoethanol	74	165.2		74	165.2
Edetic acid	>100	>212	DIN 51758		
Positive Control Salmon DNA					
Edetic acid	>100	>212	DIN 51758		

Auto-ignition temperature

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

SECTION 9: Physical and chemical properties

Decomposition temperature	:	<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.	
	pH	:	<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	
Viscosity		:	<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.	
	Solubility(ies)	:	<input checked="" type="checkbox"/> 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.	

SECTION 9: Physical and chemical properties

	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.
Partition coefficient: n-octanol/water	<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	-1.38
Vapour pressure	<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	3.2 kPa (23.8 mm Hg) [room temperature] 12.3 kPa (92.258 mm Hg) [50°C (122°F)]

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<input checked="" type="checkbox"/> PCR Master Mix						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
10X PCR Primer Mix						
water	23.8	3.2		92.258	12.3	
60 mM EDTA						
water	23.8	3.2		92.258	12.3	
Edetic acid	0	0				
10X Ddel Buffer						
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	
10X NlaIII/HaeIII Buffer						
water	23.8	3.2		92.258	12.3	

SECTION 9: Physical and chemical properties

potassium acetate	0.00000013	0.000000017		
100X BSA				
water	23.8	3.2	92.258	12.3
Glycerol	0.000075	0.00001	0.0025	0.00033
10X Ddel Restriction Enzyme				
water	23.8	3.2	92.258	12.3
Glycerol	0.000075	0.00001	0.0025	0.00033
10X NlaIII Restriction Enzyme				
water	23.8	3.2	92.258	12.3
Glycerol	0.000075	0.00001	0.0025	0.00033
10X HaeIII Restriction Enzyme				
water	23.8	3.2	92.258	12.3
2-Mercaptoethanol	0.98	0.13		
Positive Control Salmon DNA				
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

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.

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

SECTION 9: Physical and chemical properties

Vapour density	:	<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	0.62 [Air = 1]

Oxidising properties	:	<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

Median particle size	:	<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.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	<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.

SECTION 10: Stability and reactivity

10X Ddel Restriction Enzyme	product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
10X NlaIII Restriction Enzyme	No specific test data related to reactivity available for this product or its ingredients.
10X HaeIII Restriction Enzyme	No specific test data related to reactivity available for this product or its ingredients.
Positive 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.

10.2 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.
Positive Control Salmon DNA	The product is stable.
Nuclease Free Water	The product is stable.

10.3 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.
Positive 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.

10.4 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	No specific data.

SECTION 10: Stability and reactivity

Enzyme
Positive Control Salmon DNA
Nuclease Free Water

No specific data.
No specific data.

10.5 Incompatible materials

: 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 oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.
May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products

: 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.
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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> 10X Ddel Buffer Sodium chloride Magnesium chloride	LD50 Oral	Rat	3000 mg/kg	-
	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
10X Ddel Buffer Sodium chloride Magnesium chloride	3000 2800	N/A N/A	N/A N/A	N/A N/A	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
10X Ddel Buffer Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitiser

Conclusion/Summary : 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)

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

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

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.

Potential acute health effects

SECTION 11: Toxicological information

Inhalation	: <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.
Ingestion	: <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.
Skin contact	: <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.
Eye contact	: <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.

Symptoms related to the physical, chemical and toxicological characteristics

SECTION 11: Toxicological information

Inhalation	:	<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.	
	Ingestion	:	<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.	
Skin contact		:	<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.	
	Eye contact	:	<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.	

[Delayed and immediate effects as well as chronic effects from short and long-term exposure](#)

[Short term exposure](#)

SECTION 11: Toxicological information

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

General	:	<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.
		Carcinogenicity	:
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.		
Mutagenicity	:		
		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.

SECTION 11: Toxicological information

Reproductive toxicity	<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.

Other information	<input checked="" type="checkbox"/> PCR Master Mix	Not available.
	10X PCR Primer Mix	Not available.
	60 mM EDTA	Not available.
	10X Ddel Buffer	Adverse symptoms may include the following: May cause skin sensitisation.
	10X NlaIII/HaeIII Buffer	Adverse symptoms may include the following: May cause skin sensitisation.
	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.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
60 mM EDTA 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
10X Ddel Buffer 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
Magnesium chloride	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
	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 -	48 hours

SECTION 12: Ecological information

	Acute LC50 2120 mg/l Fresh water Acute NOEC 100 mg/l Fresh water	Adult Fish - Pimephales promelas Algae - Desmodesmus subspicatus	96 hours 72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
50 mM EDTA Edetic acid	-	-	Not readily
Nuclease Free Water water	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
50 mM EDTA Edetic acid	-3.86	1.8	low
Nuclease Free Water water	-1.38	-	low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Nuclease Free Water water	Not applicable (Inorganic)	N/A	N/A	N/A	Not applicable (Inorganic)	N/A	N/A

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 13: Disposal considerations

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

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

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

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Label	:	<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.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

SECTION 15: Regulatory information

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

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	: <input checked="" type="checkbox"/> All components are active or exempted.
Viet Nam	: Not determined.

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

SECTION 16: Other information

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

SECTION 16: Other information

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

Classification	Justification
10X Ddel Buffer Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

50 mM EDTA H319	Causes serious eye irritation.
10X Ddel Buffer H319 H410 H412	Causes serious eye irritation. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
10X Nlalll/Haelll Buffer H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Full text of classifications [CLP/GHS]

50 mM EDTA Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
10X Ddel Buffer Aquatic Chronic 1 Aquatic Chronic 3 Eye Irrit. 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
10X Nlalll/Haelll Buffer Eye Irrit. 2 Skin Irrit. 2 STOT SE 3	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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