

Material Safety Data Sheet

Genotyping PCR Combo Pack

1. Product and company identification

Product name	: Genotyping PCR Combo Pack																				
Material uses	: Analytical reagent.																				
	<table> <tr><td>RNase</td><td>1 ml</td></tr> <tr><td>Pronase</td><td>2 ml</td></tr> <tr><td>Solution 1</td><td>500 ml</td></tr> <tr><td>Solution 2</td><td>420 ml</td></tr> <tr><td>Solution 3</td><td>150 ml</td></tr> <tr><td>100 mM dNTP Mix</td><td>0.4 ml</td></tr> <tr><td>PhiX174/Hae III Marker</td><td>0.04 ml</td></tr> <tr><td>Paq5000 Hotstart PCR Master Mix</td><td>2.5 ml</td></tr> <tr><td>SureStart Taq DNA polymerase</td><td>0.02 ml</td></tr> <tr><td>SureStart Taq 10x reaction buffer</td><td>1 m</td></tr> </table>	RNase	1 ml	Pronase	2 ml	Solution 1	500 ml	Solution 2	420 ml	Solution 3	150 ml	100 mM dNTP Mix	0.4 ml	PhiX174/Hae III Marker	0.04 ml	Paq5000 Hotstart PCR Master Mix	2.5 ml	SureStart Taq DNA polymerase	0.02 ml	SureStart Taq 10x reaction buffer	1 m
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Supplier/Manufacturer	: Agilent Technologies, Inc. 1834 State Highway 71 West Cedar Creek, TX 78612 800-227-9770																				
Part No. (Chemical Kit)	: 929903																				
Part No.	: <table> <tr><td>RNase</td><td>200600-81</td></tr> <tr><td>Pronase</td><td>200600-82</td></tr> <tr><td>Solution 1 (200600-13)</td><td>200600-13</td></tr> <tr><td>Solution 2 (200600-14)</td><td>200600-14</td></tr> <tr><td>Solution 3 (200600-15)</td><td>200600-15</td></tr> <tr><td>100 mM dNTP Mix</td><td>200415-51</td></tr> <tr><td>PhiX174/Hae III Marker</td><td>201100-81</td></tr> <tr><td>Paq5000 Hotstart PCR Master Mix</td><td>600870-51</td></tr> <tr><td>SureStart Taq DNA polymerase</td><td>600280-51</td></tr> <tr><td>SureStart Taq 10x reaction buffer</td><td>600280-52</td></tr> </table>	RNase	200600-81	Pronase	200600-82	Solution 1 (200600-13)	200600-13	Solution 2 (200600-14)	200600-14	Solution 3 (200600-15)	200600-15	100 mM dNTP Mix	200415-51	PhiX174/Hae III Marker	201100-81	Paq5000 Hotstart PCR Master Mix	600870-51	SureStart Taq DNA polymerase	600280-51	SureStart Taq 10x reaction buffer	600280-52
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Validation date	: 04/23/2013																				
In case of emergency	: Chemtrec: 1-800-424-9300																				

2. Hazards identification

Physical state	: RNase	Liquid.
	Pronase	Liquid.
	Solution 1	Liquid.
	Solution 2	Liquid.
	Solution 3	Liquid.
	100 mM dNTP Mix	Liquid.
	PhiX174/Hae III Marker	Liquid.
	Paq5000 Hotstart PCR Master Mix	Liquid.
	SureStart Taq DNA polymerase	Liquid.
	SureStart Taq 10x reaction buffer	Liquid.
Odor	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.

2. Hazards identification

OSHA/HCS status	: RNase	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Pronase	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Solution 1	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Solution 2	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Solution 3	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	100 mM dNTP Mix	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	PhiX174/Hae III Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Paq5000 Hotstart PCR Master Mix	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	SureStart Taq DNA polymerase	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	SureStart Taq 10x reaction buffer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview

Signal word

: RNase	No signal word.
Pronase	WARNING!
Solution 1	WARNING!
Solution 2	WARNING!
Solution 3	CAUTION!
100 mM dNTP Mix	No signal word.
PhiX174/Hae III Marker	No signal word.
Paq5000 Hotstart PCR Master Mix	No signal word.
SureStart Taq DNA polymerase	No signal word.
SureStart Taq 10x reaction buffer	WARNING!

Hazard statements

: RNase	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Pronase	CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY REACTION.
Solution 1	CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

2. Hazards identification

Solution 2	HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Solution 3	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
100 mM dNTP Mix	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
PhiX174/Hae III Marker	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
Paq5000 Hotstart PCR Master Mix	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
SureStart Taq DNA polymerase	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
SureStart Taq 10x reaction buffer	CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Precautions

: RNase	Avoid breathing vapor or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Pronase	Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Solution 1	Do not ingest. Do not get in eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Solution 2	Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Solution 3	Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
100 mM dNTP Mix	Avoid breathing vapor or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
PhiX174/Hae III Marker	No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.
Paq5000 Hotstart PCR Master Mix	Avoid breathing vapor or mist. Avoid contact with

2. Hazards identification

SureStart Taq DNA polymerase

eyes. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

SureStart Taq 10x reaction buffer

Avoid breathing vapor or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry

: RNase
Pronase
Solution 1
Solution 2
Solution 3
100 mM dNTP Mix
PhiX174/Hae III Marker
Paq5000 Hotstart PCR Master Mix
SureStart Taq DNA polymerase
SureStart Taq 10x reaction buffer

Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.

Potential acute health effects

Inhalation

: RNase
Pronase

Slightly irritating to the respiratory system.
Irritating to respiratory system. May cause sensitization by inhalation.

Solution 1
Solution 2
Solution 3
100 mM dNTP Mix

Slightly irritating to the respiratory system.
Irritating to respiratory system.
Slightly irritating to the respiratory system.
Slightly irritating to the respiratory system.
Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

PhiX174/Hae III Marker
Paq5000 Hotstart PCR Master Mix
SureStart Taq DNA polymerase
SureStart Taq 10x reaction buffer

No known significant effects or critical hazards.
Slightly irritating to the respiratory system.
Slightly irritating to the respiratory system.
Irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion

: RNase
Pronase
Solution 1
Solution 2
Solution 3
100 mM dNTP Mix
PhiX174/Hae III Marker
Paq5000 Hotstart PCR Master Mix
SureStart Taq DNA polymerase
SureStart Taq 10x reaction buffer

No known significant effects or critical hazards.
No known significant effects or critical hazards.
Harmful if swallowed.
Harmful if swallowed.
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

: RNase
Pronase
Solution 1
Solution 2

Slightly irritating to the skin.
Irritating to skin.
Slightly irritating to the skin.
Toxic in contact with skin. Irritating to skin. May cause sensitization by skin contact.

Solution 3
100 mM dNTP Mix
PhiX174/Hae III Marker
Paq5000 Hotstart PCR Master Mix
SureStart Taq DNA polymerase

Slightly irritating to the skin.
Slightly irritating to the skin.
No known significant effects or critical hazards.
Slightly irritating to the skin.
Slightly irritating to the skin.

2. Hazards identification

	SureStart Taq 10x reaction buffer	Irritating to skin.
Eyes	: RNase	Slightly irritating to the eyes.
	Pronase	Irritating to eyes.
	Solution 1	Severely irritating to eyes. Risk of serious damage to eyes.
	Solution 2	Irritating to eyes.
	Solution 3	Moderately irritating to eyes.
	100 mM dNTP Mix	Slightly irritating to the eyes.
	PhiX174/Hae III Marker	No known significant effects or critical hazards.
	Paq5000 Hotstart PCR Master Mix	Slightly irritating to the eyes.
	SureStart Taq DNA polymerase	Slightly irritating to the eyes.
	SureStart Taq 10x reaction buffer	Irritating to eyes.

Potential chronic health effects

Chronic effects	: RNase	No known significant effects or critical hazards.
	Pronase	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
	Solution 1	Contains material that may cause target organ damage, based on animal data.
	Solution 2	Contains material that may cause target organ damage, based on animal data. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
	Solution 3	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
	100 mM dNTP Mix	Contains material that may cause target organ damage, based on animal data.
	PhiX174/Hae III Marker	No known significant effects or critical hazards.
	Paq5000 Hotstart PCR Master Mix	No known significant effects or critical hazards.
	SureStart Taq DNA polymerase	Contains material that may cause target organ damage, based on animal data.
	SureStart Taq 10x reaction buffer	Contains material that may cause target organ damage, based on animal data.

Carcinogenicity	: RNase	No known significant effects or critical hazards.
	Pronase	No known significant effects or critical hazards.
	Solution 1	No known significant effects or critical hazards.
	Solution 2	No known significant effects or critical hazards.
	Solution 3	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	PhiX174/Hae III Marker	No known significant effects or critical hazards.
	Paq5000 Hotstart PCR Master Mix	No known significant effects or critical hazards.
	SureStart Taq DNA polymerase	No known significant effects or critical hazards.
	SureStart Taq 10x reaction buffer	No known significant effects or critical hazards.

Mutagenicity	: RNase	No known significant effects or critical hazards.
	Pronase	No known significant effects or critical hazards.
	Solution 1	No known significant effects or critical hazards.
	Solution 2	No known significant effects or critical hazards.
	Solution 3	No known significant effects or critical hazards.
	100 mM dNTP Mix	No known significant effects or critical hazards.
	PhiX174/Hae III Marker	No known significant effects or critical hazards.
	Paq5000 Hotstart PCR Master Mix	No known significant effects or critical hazards.
	SureStart Taq DNA polymerase	No known significant effects or critical hazards.
	SureStart Taq 10x reaction buffer	No known significant effects or critical hazards.

2. Hazards identification

Teratogenicity	: RNase Pronase Solution 1 Solution 2 Solution 3 100 mM dNTP Mix PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix SureStart Taq DNA polymerase SureStart Taq 10x reaction buffer	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.
Developmental effects	: RNase Pronase Solution 1 Solution 2 Solution 3 100 mM dNTP Mix PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix SureStart Taq DNA polymerase SureStart Taq 10x reaction buffer	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.
Fertility effects	: RNase Pronase Solution 1 Solution 2 Solution 3 100 mM dNTP Mix PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix SureStart Taq DNA polymerase SureStart Taq 10x reaction buffer	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.
Target organs	: RNase Pronase Solution 1 Solution 2 Solution 3 100 mM dNTP Mix PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix SureStart Taq DNA polymerase SureStart Taq 10x reaction buffer	Not available. Not available. Contains material which may cause damage to the following organs: gastrointestinal tract, upper respiratory tract, eye, lens or cornea, teeth. Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes. Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes, stomach. Not available. Not available. Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eye, lens or cornea. Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eye, lens or cornea. Contains material which may cause damage to the following organs: gastrointestinal tract, upper respiratory tract, skin, eye, lens or cornea.
<u>Over-exposure signs/symptoms</u>		
Inhalation	: RNase Pronase Solution 1	Adverse symptoms may include the following: respiratory tract irritation coughing Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma Adverse symptoms may include the following: respiratory tract irritation

2. Hazards identification

	Solution 2	coughing Adverse symptoms may include the following: respiratory tract irritation
	Solution 3	coughing Adverse symptoms may include the following: respiratory tract irritation
	100 mM dNTP Mix	coughing Adverse symptoms may include the following: respiratory tract irritation
	PhiX174/Hae III Marker	No specific data.
	Paq5000 Hotstart PCR Master Mix	Adverse symptoms may include the following: respiratory tract irritation
	SureStart Taq DNA polymerase	coughing Adverse symptoms may include the following: respiratory tract irritation
	SureStart Taq 10x reaction buffer	coughing Adverse symptoms may include the following: respiratory tract irritation
Ingestion	: RNase	No specific data.
	Pronase	No specific data.
	Solution 1	No specific data.
	Solution 2	No specific data.
	Solution 3	No specific data.
	100 mM dNTP Mix	No specific data.
	PhiX174/Hae III Marker	No specific data.
	Paq5000 Hotstart PCR Master Mix	No specific data.
	SureStart Taq DNA polymerase	No specific data.
	SureStart Taq 10x reaction buffer	No specific data.
Skin	: RNase	Adverse symptoms may include the following: irritation redness
	Pronase	Adverse symptoms may include the following: irritation redness
	Solution 1	Adverse symptoms may include the following: irritation redness
	Solution 2	Adverse symptoms may include the following: irritation redness dryness cracking
	Solution 3	Adverse symptoms may include the following: irritation redness
	100 mM dNTP Mix	Adverse symptoms may include the following: irritation redness
	PhiX174/Hae III Marker	No specific data.
	Paq5000 Hotstart PCR Master Mix	Adverse symptoms may include the following: irritation redness
	SureStart Taq DNA polymerase	Adverse symptoms may include the following: irritation redness
	SureStart Taq 10x reaction buffer	Adverse symptoms may include the following: irritation redness

2. Hazards identification

Eyes	: RNase	Adverse symptoms may include the following: irritation watering redness
	Pronase	Adverse symptoms may include the following: pain or irritation watering redness
	Solution 1	Adverse symptoms may include the following: pain or irritation watering redness
	Solution 2	Adverse symptoms may include the following: pain or irritation watering redness
	Solution 3	Adverse symptoms may include the following: irritation watering redness
	100 mM dNTP Mix	Adverse symptoms may include the following: irritation watering redness
	PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix	No specific data. Adverse symptoms may include the following: irritation watering redness
	SureStart Taq DNA polymerase	Adverse symptoms may include the following: irritation watering redness
	SureStart Taq 10x reaction buffer	Adverse symptoms may include the following: pain or irritation watering redness
	Medical conditions aggravated by over-exposure	: RNase
Pronase		Pre-existing respiratory disorders may be aggravated by over-exposure to this product.
Solution 1		Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
Solution 2		Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
Solution 3		Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
100 mM dNTP Mix PhiX174/Hae III Marker Paq5000 Hotstart PCR Master Mix		None known. None known. Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
SureStart Taq DNA polymerase		Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
SureStart Taq 10x reaction buffer		Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
RNase Nuclease, ribo-	9001-99-4	0.1 - 1
Pronase Proteinase, Streptomyces griseus	9036-06-0	10 - 30
Solution 1 Sucrose	57-50-1	15 - 40
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	9002-93-1	1 - 5
Solution 2 Sodium dodecyl sulphate	151-21-3	1 - 5
Solution 3 Sodium chloride	7647-14-5	15 - 40
100 mM dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	2564-35-4	0.5 - 1.5
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	1927-31-7	0.5 - 1.5
Paq5000 Hotstart PCR Master Mix Glycerol	56-81-5	0.5 - 1.5
SureStart Taq DNA polymerase Glycerol	56-81-5	30 - 60
SureStart Taq 10x reaction buffer Potassium chloride	7447-40-7	1 - 5
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	1185-53-1	1 - 5

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

4. First aid measures

Eye contact	: RNase	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	Pronase	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	Solution 1	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	Solution 2	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	Solution 3	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	100 mM dNTP Mix	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

4. First aid measures

	PhiX174/Hae III Marker	least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
	Paq5000 Hotstart PCR Master Mix	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	SureStart Taq DNA polymerase	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
	SureStart Taq 10x reaction buffer	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	: RNase	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	Pronase	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	Solution 1	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	Solution 2	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	Solution 3	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	100 mM dNTP Mix	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	PhiX174/Hae III Marker	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
	Paq5000 Hotstart PCR Master Mix	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
	SureStart Taq DNA polymerase	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash

4. First aid measures

	SureStart Taq 10x reaction buffer	clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	: RNase	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Pronase	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Solution 1	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Solution 2	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Solution 3	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	100 mM dNTP Mix	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	PhiX174/Hae III Marker	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.
	Paq5000 Hotstart PCR Master Mix	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	SureStart Taq DNA polymerase	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	SureStart Taq 10x reaction buffer	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest

4. First aid measures

Ingestion	: RNase	occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Pronase	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Solution 1	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Solution 2	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	Solution 3	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	100 mM dNTP Mix	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	PhiX174/Hae III Marker	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
	Paq5000 Hotstart PCR Master Mix	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	SureStart Taq DNA polymerase	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
	SureStart Taq 10x reaction buffer	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first-aiders	: RNase	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.
	Pronase	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the

4. First aid measures

	person providing aid to give mouth-to-mouth resuscitation.
Solution 1	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.
Solution 2	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Solution 3	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.
100 mM dNTP Mix	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.
PhiX174/Hae III Marker	No action shall be taken involving any personal risk or without suitable training.
Paq5000 Hotstart PCR Master Mix	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.
SureStart Taq DNA polymerase	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.
SureStart Taq 10x reaction buffer	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician	
: RNase	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Pronase	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Solution 1	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Solution 2	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Solution 3	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
100 mM dNTP Mix	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.
PhiX174/Hae III Marker	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Paq5000 Hotstart PCR Master Mix	No specific treatment. Treat symptomatically.

4. First aid measures

SureStart Taq DNA polymerase

SureStart Taq 10x reaction buffer

Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Flammability of the product

: RNase

Pronase

Solution 1

Solution 2

Solution 3

100 mM dNTP Mix

PhiX174/Hae III Marker

Paq5000 Hotstart PCR Master Mix

SureStart Taq DNA polymerase

SureStart Taq 10x reaction buffer

In a fire or if heated, a pressure increase will occur and the container may burst.

In a fire or if heated, a pressure increase will occur and the container may burst.

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In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable

: RNase

Pronase

Solution 1

Solution 2

Solution 3

100 mM dNTP Mix

PhiX174/Hae III Marker

Paq5000 Hotstart PCR Master Mix

SureStart Taq DNA polymerase

SureStart Taq 10x reaction buffer

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

Not suitable

: RNase

Pronase

Solution 1

Solution 2

Solution 3

100 mM dNTP Mix

PhiX174/Hae III Marker

Paq5000 Hotstart PCR Master Mix

SureStart Taq DNA polymerase

SureStart Taq 10x reaction buffer

None known.

None known.

None known.

None known.

None known.

None known.

None known.

None known.

None known.

None known.

5. Fire-fighting measures

Special exposure hazards	<p>: RNase</p> <p>Pronase</p> <p>Solution 1</p> <p>Solution 2</p> <p>Solution 3</p> <p>100 mM dNTP Mix</p> <p>PhiX174/Hae III Marker</p> <p>Paq5000 Hotstart PCR Master Mix</p> <p>SureStart Taq DNA polymerase</p> <p>SureStart Taq 10x reaction buffer</p>	<p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>No action shall be taken involving any personal risk or without suitable training.</p>
Hazardous thermal decomposition products	<p>: RNase</p> <p>Pronase</p> <p>Solution 1</p> <p>Solution 2</p> <p>Solution 3</p> <p>100 mM dNTP Mix</p> <p>PhiX174/Hae III Marker</p> <p>Paq5000 Hotstart PCR Master Mix</p> <p>SureStart Taq DNA polymerase</p> <p>SureStart Taq 10x reaction buffer</p>	<p>No specific data.</p> <p>No specific data.</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>sulfur oxides</p> <p>metal oxide/oxides</p> <p>Decomposition products may include the following materials:</p> <p>halogenated compounds</p> <p>metal oxide/oxides</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>nitrogen oxides</p> <p>phosphorus oxides</p> <p>No specific data.</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>Decomposition products may include the following materials:</p> <p>carbon dioxide</p> <p>carbon monoxide</p> <p>nitrogen oxides</p> <p>halogenated compounds</p> <p>metal oxide/oxides</p>
Special protective equipment for fire-fighters	<p>: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</p>	

6. Accidental release measures

Personal precautions	: RNase	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Pronase	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Solution 1	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Solution 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	Solution 3	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	100 mM dNTP Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
	PhiX174/Hae III Marker	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8).
	Paq5000 Hotstart PCR Master Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected

6. Accidental release measures

SureStart Taq DNA polymerase	<p>personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p> <p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
SureStart Taq 10x reaction buffer	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).</p>
Environmental precautions : RNase	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Pronase	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Solution 1	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Solution 2	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Solution 3	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
100 mM dNTP Mix	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
PhiX174/Hae III Marker	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p>
Paq5000 Hotstart PCR Master Mix	<p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,</p>

6. Accidental release measures

	SureStart Taq DNA polymerase	waterways, soil or air). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SureStart Taq 10x reaction buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	<p>: RNase</p> <p>Pronase</p> <p>Solution 1</p> <p>Solution 2</p> <p>Solution 3</p> <p>100 mM dNTP Mix</p> <p>PhiX174/Hae III Marker</p> <p>Paq5000 Hotstart PCR Master Mix</p> <p>SureStart Taq DNA polymerase</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

6. Accidental release measures

SureStart Taq 10x reaction buffer

waste disposal container. Dispose 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.

7. Handling and storage

Handling

: RNase

Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Pronase

Put on appropriate personal protective equipment (see Section 8). 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. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Solution 1

Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Solution 2

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking

7. Handling and storage

Solution 3	<p>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. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
100 mM dNTP Mix	<p>Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
PhiX174/Hae III Marker	<p>Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
Paq5000 Hotstart PCR Master Mix	<p>Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only</p>

7. Handling and storage

		with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureStart Taq DNA polymerase	Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureStart Taq 10x reaction buffer	Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: RNase	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Pronase	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
	Solution 1	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food

7. Handling and storage

Solution 2	and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Solution 3	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
100 mM dNTP 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
PhiX174/Hae III Marker	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Paq5000 Hotstart 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureStart Taq DNA polymerase	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

7. Handling and storage

SureStart Taq 10x reaction buffer

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

8. Exposure controls/personal protection

Ingredient	Exposure limits
Solution 1 Sucrose	<p>ACGIH TLV (United States, 2/2010). TWA: 10 mg/m³ 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p> <p>NIOSH REL (United States, 6/2009). TWA: 5 mg/m³ 10 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 10 hour(s). Form: Total</p> <p>OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p>
Paq5000 Hotstart PCR Master Mix Glycerol	<p>ACGIH TLV (United States, 2/2010). TWA: 10 mg/m³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.</p> <p>OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 8 hour(s). Form: Total dust</p>
SureStart Taq DNA polymerase Glycerol	<p>ACGIH TLV (United States, 2/2010). TWA: 10 mg/m³ 8 hour(s). Form: Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.</p> <p>OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 8 hour(s). Form: Total dust</p>

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.

Engineering measures

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.
- Personal protection**
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : 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.
- Eyes** : 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 or dusts.
- Skin** : 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.
- 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.
- Other protection** : Not available.

9. Physical and chemical properties

- Physical state** : RNase Liquid.
Pronase Liquid.
Solution 1 Liquid.
Solution 2 Liquid.
Solution 3 Liquid.
100 mM dNTP Mix Liquid.
PhiX174/Hae III Marker Liquid.
Paq5000 Hotstart PCR Master Mix Liquid.
SureStart Taq DNA polymerase Liquid.
SureStart Taq 10x reaction buffer Liquid.
- Flash point** : RNase Not available.
Pronase Not available.
Solution 1 Not available.
Solution 2 Not available.
Solution 3 Not available.
100 mM dNTP Mix Not available.
PhiX174/Hae III Marker Not available.
Paq5000 Hotstart PCR Master Mix Not available.
SureStart Taq DNA polymerase Not available.
SureStart Taq 10x reaction buffer Not available.
- Auto-ignition temperature** : RNase Not available.
Pronase Not available.
Solution 1 Not available.
Solution 2 Not available.
Solution 3 Not available.
100 mM dNTP Mix Not available.
PhiX174/Hae III Marker Not available.
Paq5000 Hotstart PCR Master Mix Not available.
SureStart Taq DNA polymerase Not available.
SureStart Taq 10x reaction buffer Not available.

9. Physical and chemical properties

Flammable limits	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
SureStart Taq 10x reaction buffer	Not available.	
Color	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
SureStart Taq 10x reaction buffer	Not available.	
Odor	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
SureStart Taq 10x reaction buffer	Not available.	
pH	: RNase	7.5
	Pronase	Not available.
	Solution 1	7.6
	Solution 2	8
	Solution 3	Not available.
	100 mM dNTP Mix	7.5
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	10
	SureStart Taq DNA polymerase	8
SureStart Taq 10x reaction buffer	8	
Boiling/condensation point	: RNase	100°C (212°F)
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	100°C (212°F)
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	100°C (212°F)
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
SureStart Taq 10x reaction buffer	Not available.	
Melting/freezing point	: RNase	0°C (32°F)
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	0°C (32°F)
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	0°C (32°F)
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
SureStart Taq 10x reaction buffer	Not available.	

9. Physical and chemical properties

Specific gravity	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.
Vapor pressure	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.
Vapor density	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.
Volatility	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.
Odor threshold	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.
Evaporation rate	: RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.

9. Physical and chemical properties

Viscosity	:	RNase	Not available.
		Pronase	Not available.
		Solution 1	Not available.
		Solution 2	Not available.
		Solution 3	Not available.
		100 mM dNTP Mix	Not available.
		PhiX174/Hae III Marker	Not available.
		Paq5000 Hotstart PCR Master Mix	Not available.
		SureStart Taq DNA polymerase	Not available.
		SureStart Taq 10x reaction buffer	Not available.
Solubility	:	RNase	Easily soluble in the following materials: cold water and hot water.
		Pronase	Easily soluble in the following materials: cold water and hot water.
		Solution 1	Soluble in the following materials: cold water and hot water.
		Solution 2	Easily soluble in the following materials: cold water and hot water.
		Solution 3	Soluble in the following materials: cold water and hot water.
		100 mM dNTP Mix	Easily soluble in the following materials: cold water and hot water.
		PhiX174/Hae III Marker	Easily soluble in the following materials: cold water and hot water.
		Paq5000 Hotstart PCR Master Mix	Easily soluble in the following materials: cold water and hot water.
		SureStart Taq DNA polymerase	Soluble in the following materials: cold water and hot water.
		SureStart Taq 10x reaction buffer	Easily soluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability	:	RNase	The product is stable.
		Pronase	The product is stable.
		Solution 1	The product is stable.
		Solution 2	The product is stable.
		Solution 3	The product is stable.
		100 mM dNTP Mix	The product is stable.
		PhiX174/Hae III Marker	The product is stable.
		Paq5000 Hotstart PCR Master Mix	The product is stable.
		SureStart Taq DNA polymerase	The product is stable.
		SureStart Taq 10x reaction buffer	The product is stable.
Conditions to avoid	:	RNase	No specific data.
		Pronase	No specific data.
		Solution 1	No specific data.
		Solution 2	No specific data.
		Solution 3	No specific data.
		100 mM dNTP Mix	No specific data.
		PhiX174/Hae III Marker	No specific data.
		Paq5000 Hotstart PCR Master Mix	No specific data.
		SureStart Taq DNA polymerase	No specific data.
		SureStart Taq 10x reaction buffer	No specific data.
Materials to avoid	:	RNase	No specific data.
		Pronase	No specific data.
		Solution 1	No specific data.
		Solution 2	No specific data.
		Solution 3	No specific data.
		100 mM dNTP Mix	No specific data.
		PhiX174/Hae III Marker	No specific data.
		Paq5000 Hotstart PCR Master Mix	No specific data.
		SureStart Taq DNA polymerase	No specific data.
		SureStart Taq 10x reaction buffer	No specific data.

10. Stability and reactivity

Hazardous decomposition products	: RNase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Pronase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Solution 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Solution 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Solution 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	100 mM dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	PhiX174/Hae III Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Paq5000 Hotstart PCR Master Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureStart Taq DNA polymerase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureStart Taq 10x reaction buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: RNase	Under normal conditions of storage and use, hazardous reactions will not occur.
	Pronase	Under normal conditions of storage and use, hazardous reactions will not occur.
	Solution 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	Solution 2	Under normal conditions of storage and use, hazardous reactions will not occur.
	Solution 3	Under normal conditions of storage and use, hazardous reactions will not occur.
	100 mM dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	PhiX174/Hae III Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	Paq5000 Hotstart PCR Master Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureStart Taq DNA polymerase	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureStart Taq 10x reaction buffer	Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Pronase Proteinase, Streptomyces griseus	LD50 Oral	Rat	3290 mg/kg	-
Solution 1 Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy- Sucrose	LD50 Oral LD50 Oral	Rat Rat	1800 mg/kg 29700 mg/kg	- -
Solution 2 Sodium dodecyl sulphate	LD50 Dermal LD50 Oral	Rabbit Rat	580 mg/kg 1288 mg/kg	- -
Solution 3 Sodium chloride	LC50 Inhalation Dusts and mists LD50 Oral	Rat Rat	>42 g/m ³ 3000 mg/kg	1 hours -
Paq5000 Hotstart PCR Master Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-
SureStart Taq DNA polymerase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
SureStart Taq 10x reaction buffer Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Solution 1 Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
Solution 2 Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	-	-
	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Guinea pig	-	-	-
	Skin - Moderate irritant	Mouse	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Human	-	-	-
Solution 3 Sodium chloride	Eyes - Moderate irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
Paq5000 Hotstart PCR Master Mix Glycerol	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
SureStart Taq DNA polymerase Glycerol	Eyes - Mild irritant	Rabbit	-	-	-

11. Toxicological information

SureStart Taq 10x reaction buffer Potassium chloride	Skin - Mild irritant	Rabbit	-	-	-
	Eyes - Mild irritant	Rabbit	-	-	-

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Solution 1 Sucrose	A4	-	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Other adverse symptoms	RNase	Not available.
	Pronase	Not available.
	Solution 1	Not available.
	Solution 2	Not available.
	Solution 3	Not available.
	100 mM dNTP Mix	Not available.
	PhiX174/Hae III Marker	Not available.
	Paq5000 Hotstart PCR Master Mix	Not available.
	SureStart Taq DNA polymerase	Not available.
	SureStart Taq 10x reaction buffer	Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Solution 1 Poly(oxy-1,2-ethanediyl), . alpha.-[4-(1,1,3, 3-tetramethylbutyl)phenyl]-. omega.-hydroxy-	Acute LC50 11.2 mg/L Fresh water	Daphnia - Daphnia magna - Neonate - 24 hours	48 hours
	Acute LC50 2800 to 3200 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
Solution 2 Sodium dodecyl sulphate	Acute EC50 15 mg/L Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 8800 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 5 to 10 ppm Marine water	Aquatic plants - Macrocystis pyrifera - Young	4 days
	Acute LC50 1500 ug/L Marine water	Crustaceans - Artemia sp.	48 hours
	Acute LC50 1.26 mg/L Fresh water	Daphnia - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 590 ug/L Fresh water	Fish - Cirrhinus mrigala - Larvae - 2 days - 4.5 mm - 51 mg	96 hours
Solution 3	Chronic NOEC 7.9 mg/L Fresh water	Daphnia	48 hours

12. Ecological information

Sodium chloride	Acute EC50 402600 to 469200 ug/L Fresh water Acute LC50 >5600 ppm Fresh water Acute LC50 1000000 ug/L Fresh water	Daphnia - Daphnia magna Crustaceans - Asellus communis Fish - Morone saxatilis - Larvae	48 hours 48 hours 96 hours
Paq5000 Hotstart PCR Master Mix Glycerol	Acute LC50 54 to 57 ml/L Fresh water	Fish - Oncorhynchus mykiss - 0.9 g	96 hours
SureStart Taq DNA polymerase Glycerol	Acute LC50 54 to 57 ml/L Fresh water	Fish - Oncorhynchus mykiss - 0.9 g	96 hours
SureStart Taq 10x reaction buffer Potassium chloride	Acute LC50 290 mg/L Marine water Acute LC50 30.1 mg/L Fresh water Acute LC50 435000 ug/L Fresh water Chronic NOEC 240.45 mg/L Marine water	Crustaceans - Americamysis bahia - 4 to 5 days Daphnia - Moinodaphnia macleayi - Neonate - 24 hours Fish - Gambusia affinis - Adult Crustaceans - Americamysis bahia - 4 to 5 days	48 hours 48 hours 96 hours 48 hours

Partition coefficient: n-octanol/water	: RNase	Not available.
	: Pronase	Not available.
	: Solution 1	Not available.
	: Solution 2	Not available.
	: Solution 3	Not available.
	: 100 mM dNTP Mix	Not available.
	: PhiX174/Hae III Marker	Not available.
	: Paq5000 Hotstart PCR Master Mix	Not available.
	: SureStart Taq DNA polymerase	Not available.
	: SureStart Taq 10x reaction buffer	Not available.

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

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

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

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

14. Transport information

Regulatory information

DOT / IMDG / IATA / : Not regulated.

15. Regulatory information

HCS Classification	: RNase Pronase	Not regulated. Irritating material Sensitizing material
	Solution 1	Irritating material Target organ effects
	Solution 2	Toxic material Irritating material Sensitizing material Target organ effects
	Solution 3	Irritating material Target organ effects Not regulated.
	100 mM dNTP Mix	Not regulated.
	PhiX174/Hae III Marker	Not regulated.
	Paq5000 Hotstart PCR Master Mix	Target organ effects
	SureStart Taq DNA polymerase	Target organ effects
	SureStart Taq 10x reaction buffer	Irritating material Target organ effects

U.S. Federal regulations : **TSCA 8(a) PAIR:** Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-; Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-

TSCA 8(a) CDR Exempt/Partial exemption: Partial exemption

United States inventory (TSCA 8b): At least one component is not listed.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Sodium chloride; Sucrose; Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

Sodium chloride: Immediate (acute) health hazard, Delayed (chronic) health hazard;
Sucrose: Delayed (chronic) health hazard; Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 311: Edetic acid; Sodium hydroxide

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : The following components are listed: SUCROSE DUST

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: .ALPHA.-D-GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL

California Prop. 65

15. Regulatory information

No products were found.

16. Other information

Label requirements	:	RNase	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
		Pronase	CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY REACTION.
		Solution 1	CAUSES EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		Solution 2	HARMFUL IF ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		Solution 3	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		100 mM dNTP Mix	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
		PhiX174/Hae III Marker	NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
		Paq5000 Hotstart PCR Master Mix	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		SureStart Taq DNA polymerase	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
		SureStart Taq 10x reaction buffer	CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

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📌 Indicates information that has changed from previously issued version.

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