

# SAFETY DATA SHEET



AffinityScript One-Step RT-PCR Kit, Part Number 600188

## Section 1. Identification

### 1.1 Product identifier

**Product name** : AffinityScript One-Step RT-PCR Kit, Part Number 600188  
**Part no. (chemical kit)** : 600188  
**Part no.** : Herculanase II RT-PCR 2X Master Mix 600188-51  
 AffinityScript RT/RNase Block 600188-52  
**Validation date** : 8/30/2022

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

**Identified uses** :  Analytical reagent.  
 Herculanase II RT-PCR 2X Master Mix 2.5 ml  
 AffinityScript RT/RNase Block 0.1 ml

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
 5301 Stevens Creek Blvd  
 Santa Clara, CA 95051, USA  
 800-227-9770

### 1.4 Emergency telephone number

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

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

**OSHA/HCS status** : Herculanase II RT-PCR 2X Master Mix This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 AffinityScript RT/RNase Block This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification of the substance or mixture

**Herculanase II RT-PCR 2X Master Mix**  
 H361 TOXIC TO REPRODUCTION - Category 2  
 H412 AQUATIC HAZARD (LONG-TERM) - Category 3

**AffinityScript RT/RNase Block**  
 H320 EYE IRRITATION - Category 2B  
 Herculanase II RT-PCR 2X Master Mix Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 1%





### 2.2 GHS label elements

**Hazard pictograms** : Herculanase II RT-PCR 2X Master Mix




**Signal word** : Herculanase II RT-PCR 2X Master Mix Warning  
 AffinityScript RT/RNase Block Warning

## Section 2. Hazards identification

<b>Hazard statements</b>	:  Herculase II RT-PCR 2X Master Mix	H361 - Suspected of damaging fertility or the unborn child. H412 - Harmful to aquatic life with long lasting effects.
	AffinityScript RT/RNase Block	H320 - Causes eye irritation.
<b>Precautionary statements</b>		
<b>Prevention</b>	:  Herculase II RT-PCR 2X Master Mix	P201 - Obtain special instructions before use.
	AffinityScript RT/RNase Block	P280 - Wear protective gloves, protective clothing and eye or face protection. P273 - Avoid release to the environment.
<b>Response</b>	:  Herculase II RT-PCR 2X Master Mix	P308 + P313 - IF exposed or concerned: Get medical advice or attention.
	AffinityScript RT/RNase Block	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
<b>Storage</b>	:  Herculase II RT-PCR 2X Master Mix	Not applicable.
	AffinityScript RT/RNase Block	Not applicable.
<b>Disposal</b>	: Herculase II RT-PCR 2X Master Mix	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	AffinityScript RT/RNase Block	Not applicable.
<b>Supplemental label elements</b>	: Herculase II RT-PCR 2X Master Mix	None known.
	AffinityScript RT/RNase Block	None known.
<b>2.3 Other hazards</b>		
<b>Hazards not otherwise classified</b>	: Herculase II RT-PCR 2X Master Mix	None known.
	AffinityScript RT/RNase Block	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Herculase II RT-PCR 2X Master Mix	Mixture
	AffinityScript RT/RNase Block	Mixture

Ingredient name	%	CAS number
 Herculase II RT-PCR 2X Master Mix		
Caesium chloride	≤5	7647-17-8
<b>AffinityScript RT/RNase Block</b>		
Glycerol	≥25 - ≤50	56-81-5

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

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

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

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: Herculase II RT-PCR 2X Master Mix	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.
	AffinityScript RT/RNase Block	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
<b>Inhalation</b>	: Herculase II RT-PCR 2X Master Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
	AffinityScript RT/RNase Block	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.
<b>Skin contact</b>	: Herculase II RT-PCR 2X Master Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	AffinityScript RT/RNase Block	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.
<b>Ingestion</b>	: Herculase II RT-PCR 2X Master Mix	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. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

## Section 4. First aid measures

AffinityScript RT/RNase Block

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

<b>Eye contact</b>	: Herculase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No known significant effects or critical hazards. Causes eye irritation.
<b>Inhalation</b>	: Herculase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: Herculase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: Herculase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Herculase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No specific data. Adverse symptoms may include the following: irritation watering redness
<b>Inhalation</b>	: Herculase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations No specific data.
<b>Skin contact</b>	: Herculase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations No specific data.
<b>Ingestion</b>	: Herculase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations No specific data.

## Section 4. First aid measures

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

<b>Notes to physician</b>	: Herculanase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Herculanase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	No specific treatment.  No specific treatment.
<b>Protection of first-aiders</b>	: Herculanase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	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.  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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Herculanase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Herculanase II RT-PCR 2X Master Mix AffinityScript RT/RNase Block	None known.  None known.

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

<b>Specific hazards arising from the chemical</b>	: Herculanase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	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. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: Herculanase II RT-PCR 2X Master Mix  AffinityScript RT/RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide

### 5.3 Advice for firefighters

## Section 5. Fire-fighting measures

<b>Special protective actions for fire-fighters</b>	: Herculase II RT-PCR 2X 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.
	AffinityScript RT/RNase Block	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.
<b>Special protective equipment for fire-fighters</b>	: Herculase II RT-PCR 2X 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.
	AffinityScript RT/RNase Block	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: Herculase II RT-PCR 2X Master Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	AffinityScript RT/RNase Block	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.
<b>For emergency responders</b>	: Herculase II RT-PCR 2X Master Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	AffinityScript RT/RNase Block	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Herculase II RT-PCR 2X Master Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
	AffinityScript RT/RNase Block

## Section 6. Accidental release measures

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

<b>Methods for cleaning up</b>	: Herculase II RT-PCR 2X 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.
	AffinityScript RT/RNase Block	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: Herculase II RT-PCR 2X Master Mix	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	AffinityScript RT/RNase Block	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Advice on general occupational hygiene</b>	: Herculase II RT-PCR 2X 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.
	AffinityScript RT/RNase Block	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.

## Section 7. Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

: Herculase II RT-PCR 2X 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. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

AffinityScript RT/RNase Block

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

### 7.3 Specific end use(s)

#### Recommendations

: Herculase II RT-PCR 2X Master Mix  
AffinityScript RT/RNase Block

Industrial applications, Professional applications.

Industrial applications, Professional applications.

#### Industrial sector specific solutions

:  Herculase II RT-PCR 2X Master Mix  
AffinityScript RT/RNase Block

Not available.

Not available.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<input checked="" type="checkbox"/> Herculase II RT-PCR 2X Master Mix Caesium chloride	None.
<input type="checkbox"/> AffinityScript RT/RNase Block Glycerol	<p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p> <p>TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p> <p>TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p>

### Biological exposure indices

No exposure indices known.

### 8.2 Exposure controls



## Section 8. Exposure controls/personal protection

- Appropriate engineering controls** : 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.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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

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

### Appearance

- |                       |                                     |                |
|-----------------------|-------------------------------------|----------------|
| <b>Physical state</b> | : Herculase II RT-PCR 2X Master Mix | Liquid.        |
|                       | : AffinityScript RT/RNase Block     | Liquid.        |
| <b>Color</b>          | : Herculase II RT-PCR 2X Master Mix | Not available. |
|                       | : AffinityScript RT/RNase Block     | Not available. |
| <b>Odor</b>           | : Herculase II RT-PCR 2X Master Mix | Not available. |
|                       | : AffinityScript RT/RNase Block     | Not available. |
| <b>Odor threshold</b> | : Herculase II RT-PCR 2X Master Mix | Not available. |
|                       | : AffinityScript RT/RNase Block     | Not available. |
| <b>pH</b>             | :                                   |                |

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

	Herculase II RT-PCR 2X Master Mix	10
	AffinityScript RT/RNase Block	8
<b>Melting point/freezing point</b>	Herculase II RT-PCR 2X Master Mix	Not available.
	AffinityScript RT/RNase Block	Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	Herculase II RT-PCR 2X Master Mix	Not available.
	AffinityScript RT/RNase Block	Not available.

<b>Flash point</b>	:		<b>Closed cup</b>			<b>Open cup</b>		
		<b>Ingredient name</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>
		<b>AffinityScript RT/RNase Block</b>						
		Glycerol				177	350.6	

<b>Evaporation rate</b>	:	Herculase II RT-PCR 2X Master Mix	Not available.
		AffinityScript RT/RNase Block	Not available.

<b>Flammability</b>	:	Herculase II RT-PCR 2X Master Mix	Not applicable.
		AffinityScript RT/RNase Block	Not applicable.

<b>Lower and upper explosion limit/flammability limit</b>	:	Herculase II RT-PCR 2X Master Mix	Not available.
		AffinityScript RT/RNase Block	Not available.

<b>Vapor pressure</b>	:		<b>Vapor Pressure at 20°C</b>			<b>Vapor pressure at 50°C</b>		
		<b>Ingredient name</b>	<b>mm Hg</b>	<b>kPa</b>	<b>Method</b>	<b>mm Hg</b>	<b>kPa</b>	<b>Method</b>
		<b>Herculase II RT-PCR 2X Master Mix</b>						
		water	23.8	3.2		92.258	12.3	
		<b>AffinityScript RT/RNase Block</b>						
		water	23.8	3.2		92.258	12.3	
		Glycerol	0.000075	0.00001		0.0025	0.00033	

<b>Relative vapor density</b>	:	Herculase II RT-PCR 2X Master Mix	Not available.
		AffinityScript RT/RNase Block	Not available.

<b>Relative density</b>	:	Herculase II RT-PCR 2X Master Mix	Not available.
		AffinityScript RT/RNase Block	Not available.

<b>Solubility(ies)</b>	:	<b>Media</b>	<b>Result</b>
		<b>Herculase II RT-PCR 2X Master Mix</b>	
		water	Soluble
		<b>AffinityScript RT/RNase Block</b>	
		water	Soluble

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

**Partition coefficient: n-octanol/water** : Herculase II RT-PCR 2X Master Mix Not applicable.  
AffinityScript RT/RNase Block Not applicable.

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
<input checked="" type="checkbox"/> Herculase II RT-PCR 2X Master Mix			
Caesium chloride	>400	>752	
<b>AffinityScript RT/RNase Block</b>			
Glycerol	370	698	

**Decomposition temperature** : Herculase II RT-PCR 2X Master Mix Not available.  
AffinityScript RT/RNase Block Not available.

**Viscosity** : Herculase II RT-PCR 2X Master Mix Not available.  
AffinityScript RT/RNase Block Not available.

### Particle characteristics

**Median particle size** : Herculase II RT-PCR 2X Master Mix Not applicable.  
AffinityScript RT/RNase Block Not applicable.

## Section 10. Stability and reactivity

**10.1 Reactivity** : Herculase II RT-PCR 2X Master Mix No specific test data related to reactivity available for this product or its ingredients.  
AffinityScript RT/RNase Block No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : Herculase II RT-PCR 2X Master Mix The product is stable.  
AffinityScript RT/RNase Block The product is stable.

**10.3 Possibility of hazardous reactions** : Herculase II RT-PCR 2X Master Mix Under normal conditions of storage and use, hazardous reactions will not occur.  
AffinityScript RT/RNase Block Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Herculase II RT-PCR 2X Master Mix No specific data.  
AffinityScript RT/RNase Block No specific data.

**10.5 Incompatible materials** : Herculase II RT-PCR 2X Master Mix May react or be incompatible with oxidizing materials.  
AffinityScript RT/RNase Block May react or be incompatible with oxidizing materials.

**10.6 Hazardous decomposition products** : Herculase II RT-PCR 2X Master Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
AffinityScript RT/RNase Block Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>Herculase II RT-PCR 2X Master Mix</b> Caesium chloride	LD50 Oral	Rat	2004 mg/kg	-
<b>AffinityScript RT/RNase Block</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>AffinityScript RT/RNase Block</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

#### Sensitization

Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : **Herculase II RT-PCR 2X Master Mix** Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.  
**AffinityScript RT/RNase Block** Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

#### Potential acute health effects

**Eye contact** : **Herculase II RT-PCR 2X Master Mix** No known significant effects or critical hazards.  
**AffinityScript RT/RNase Block** Causes eye irritation.

**Inhalation** : **Herculase II RT-PCR 2X Master Mix** No known significant effects or critical hazards.  
**AffinityScript RT/RNase Block** No known significant effects or critical hazards.

**Skin contact** : **Herculase II RT-PCR 2X Master Mix** No known significant effects or critical hazards.  
**AffinityScript RT/RNase Block** No known significant effects or critical hazards.

## Section 11. Toxicological information

<b>Ingestion</b>	: Herculanase II RT-PCR 2X Master Mix	No known significant effects or critical hazards.
	: AffinityScript RT/RNase Block	No known significant effects or critical hazards.

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

<b>Eye contact</b>	: Herculanase II RT-PCR 2X Master Mix	No specific data.
	: AffinityScript RT/RNase Block	Adverse symptoms may include the following: irritation watering redness
<b>Inhalation</b>	: Herculanase II RT-PCR 2X Master Mix	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations
	: AffinityScript RT/RNase Block	No specific data.
<b>Skin contact</b>	: Herculanase II RT-PCR 2X Master Mix	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations
	: AffinityScript RT/RNase Block	No specific data.
<b>Ingestion</b>	: Herculanase II RT-PCR 2X Master Mix	Adverse symptoms may include the following:  reduced fetal weight increase in fetal deaths skeletal malformations
	: AffinityScript RT/RNase Block	No specific data.

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	: Herculanase II RT-PCR 2X Master Mix	No known significant effects or critical hazards.
	: AffinityScript RT/RNase Block	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Herculanase II RT-PCR 2X Master Mix	No known significant effects or critical hazards.
	: AffinityScript RT/RNase Block	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Herculanase II RT-PCR 2X Master Mix	No known significant effects or critical hazards.
	: AffinityScript RT/RNase Block	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: Herculanase II RT-PCR 2X Master Mix	Suspected of damaging fertility or the unborn child.
	: AffinityScript RT/RNase Block	No known significant effects or critical hazards.

### Numerical measures of toxicity

## Section 11. Toxicological information

### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>Herculase II RT-PCR 2X Master Mix</b> Herculase II RT-PCR 2X Master Mix Caesium chloride	66800.0 2004	N/A N/A	N/A N/A	N/A N/A	N/A N/A
<b>AffinityScript RT/RNase Block</b> Glycerol	12600	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Herculase II RT-PCR 2X Master Mix</b> Caesium chloride	Acute EC50 135000 µg/l Fresh water Acute LC50 7400 µg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult Daphnia - Daphnia hyalina - Adult	48 hours 48 hours
<b>AffinityScript RT/RNase Block</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>AffinityScript RT/RNase Block</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>AffinityScript RT/RNase Block</b> Glycerol	-1.76	-	low

### 12.4 Mobility in soil

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

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

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

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

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

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

## Section 14. Transport information

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

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

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

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** Edetic acid

**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

## Section 15. Regulatory information

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : **Herculase II RT-PCR 2X Master Mix** TOXIC TO REPRODUCTION - Category 2  
**AffinityScript RT/RNase Block** EYE IRRITATION - Category 2B

#### Composition/information on ingredients

Name	%	Classification
<b>Herculase II RT-PCR 2X Master Mix</b>		
Caesium chloride	≤5	TOXIC TO REPRODUCTION - Category 2
[2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]ammonium hydrogen sulphate	≤3	COMBUSTIBLE DUSTS
<b>AffinityScript RT/RNase Block</b>		
Glycerol	≥25 - ≤50	EYE IRRITATION - Category 2B

### State regulations

**Massachusetts** : The following components are listed: GLYCERINE MIST

**New York** : None of the components are listed.

**New Jersey** : **H** The following components are listed: GLYCERIN

**Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### 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.

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

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



## Section 15. Regulatory information

<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
<b>Mercurase II RT-PCR 2X Master Mix</b> TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method
<b>AffinityScript RT/RNase Block</b> EYE IRRITATION - Category 2B	Calculation method

### History

<b>Date of issue</b>	: 08/30/2022
<b>Date of previous issue</b>	: 11/22/2019
<b>Version</b>	: 6

### Key to abbreviations

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

📌 Indicates information that has changed from previously issued version.

### Notice to reader

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