

# SAFETY DATA SHEET



AffinityScript Multiple Temperature Reverse Transcriptase, Part Number 600105

## Section 1. Identification

**Product identifier** : AffinityScript Multiple Temperature Reverse Transcriptase, Part Number 600105  
**Part no. (chemical kit)** : 600105  
**Part no.** : AffinityScript Multi-Temp RT 600105-51  
 10X AffinityScript RT Buffer 600100-52  
 100 mM DTT 600098-53

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

**Material uses** : Analytical reagent.  
 AffinityScript Multi-Temp RT 10 µl (10 reactions)  
 10X AffinityScript RT Buffer 1000 µl  
 100 mM DTT 40 µl

**Supplier/Manufacturer** : Agilent Technologies Australia Pty Ltd  
 679 Springvale Road  
 Mulgrave  
 Victoria 3170, Australia  
 1800 802 402

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(61)-290372994

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

Not classified.

AffinityScript Multi-Temp RT	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
10X AffinityScript RT Buffer	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
100 mM DTT	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
10X AffinityScript RT Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 7.9%

### GHS label elements

**Signal word** :  AffinityScript Multi-Temp RT No signal word.  
 10X AffinityScript RT Buffer No signal word.  
 100 mM DTT No signal word.

**Hazard statements** :  AffinityScript Multi-Temp RT No known significant effects or critical hazards.  
 10X AffinityScript RT Buffer No known significant effects or critical hazards.  
 100 mM DTT No known significant effects or critical hazards.

### Precautionary statements

**Prevention** :  AffinityScript Multi-Temp RT Not applicable.  
 10X AffinityScript RT Buffer Not applicable.  
 100 mM DTT Not applicable.

## Section 2. Hazard(s) identification

<b>Response</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>		
<b>Additional warning phrases</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not applicable. Not applicable. Not applicable.
<b>Other hazards which do not result in classification</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	None known. None known. None known.

## Section 3. Composition and ingredient information

<b>Substance/mixture</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Mixture Mixture Mixture
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### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
AffinityScript Multi-Temp RT Glycerol	≥30 - ≤60	56-81-5

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

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

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: AffinityScript Multi-Temp RT  10X AffinityScript RT Buffer  100 mM DTT	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
<b>Inhalation</b>	: AffinityScript Multi-Temp RT  10X AffinityScript RT Buffer  100 mM DTT	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a

## Section 4. First aid measures

		position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: AffinityScript Multi-Temp RT	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	10X AffinityScript RT Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100 mM DTT	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: AffinityScript Multi-Temp RT	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	10X AffinityScript RT Buffer	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	100 mM DTT	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

<b>Eye contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Inhalation</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.

## Section 4. First aid measures

<b>Ingestion</b>	: AffinityScript Multi-Temp RT	No specific data.
	10X AffinityScript RT Buffer	No specific data.
	100 mM DTT	No specific data.

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

<b>Notes to physician</b>	: AffinityScript Multi-Temp RT	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	10X AffinityScript RT Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	100 mM DTT	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: AffinityScript Multi-Temp RT	No specific treatment.
	10X AffinityScript RT Buffer	No specific treatment.
	100 mM DTT	No specific treatment.
<b>Protection of first-aiders</b>	: AffinityScript Multi-Temp RT	No action shall be taken involving any personal risk or without suitable training.
	10X AffinityScript RT Buffer	No action shall be taken involving any personal risk or without suitable training.
	100 mM DTT	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: AffinityScript Multi-Temp RT	Use an extinguishing agent suitable for the surrounding fire.
	10X AffinityScript RT Buffer	Use an extinguishing agent suitable for the surrounding fire.
	100 mM DTT	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: AffinityScript Multi-Temp RT	None known.
	10X AffinityScript RT Buffer	None known.
	100 mM DTT	None known.
<b>Specific hazards arising from the chemical</b>	: AffinityScript Multi-Temp RT	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X AffinityScript RT Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	100 mM DTT	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: AffinityScript Multi-Temp RT	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10X AffinityScript RT Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	100 mM DTT	Decomposition products may include the following materials: carbon dioxide

## Section 5. Firefighting measures

carbon monoxide  
sulfur oxides

<b>Special protective actions for fire-fighters</b>	: AffinityScript Multi-Temp RT	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	10X AffinityScript RT Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	100 mM DTT	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>	: AffinityScript Multi-Temp RT	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	10X AffinityScript RT Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	100 mM DTT	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: AffinityScript Multi-Temp RT	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	10X AffinityScript RT Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	100 mM DTT	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: AffinityScript Multi-Temp RT	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	10X AffinityScript RT Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	100 mM DTT	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

<b>Environmental precautions</b>	: AffinityScript Multi-Temp RT	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	10X AffinityScript RT Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	100 mM DTT	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	: AffinityScript Multi-Temp RT	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	10X AffinityScript RT Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	100 mM DTT	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	: AffinityScript Multi-Temp RT	Put on appropriate personal protective equipment (see Section 8).
	10X AffinityScript RT Buffer	Put on appropriate personal protective equipment (see Section 8).
	100 mM DTT	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: AffinityScript Multi-Temp RT	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	10X AffinityScript RT Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	100 mM DTT	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face



## Section 7. Handling and storage

before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : AffinityScript Multi-Temp RT

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

10X AffinityScript RT Buffer

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

100 mM DTT

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

## Section 8. Exposure controls and personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
AffinityScript Multi-Temp RT Glycerol	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

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

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

[Individual protection measures](#)

## Section 8. Exposure controls and personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : AffinityScript Multi-Temp RT Liquid.  
10X AffinityScript RT Buffer Liquid.  
100 mM DTT Liquid.
- Colour** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT Not available.
- Odour** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT Not available.
- Odour threshold** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT Not available.
- pH** : AffinityScript Multi-Temp RT 8  
10X AffinityScript RT Buffer 8.3  
100 mM DTT Not available.
- Melting point** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT 0°C (32°F)
- Boiling point** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT 100°C (212°F)
- Flash point** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT Not available.
- Evaporation rate** : AffinityScript Multi-Temp RT Not available.  
10X AffinityScript RT Buffer Not available.  
100 mM DTT Not available.
- Flammability (solid, gas)** : AffinityScript Multi-Temp RT Not applicable.  
10X AffinityScript RT Buffer Not applicable.  
100 mM DTT Not applicable.



## Section 9. Physical and chemical properties

<b>Lower and upper explosive (flammable) limits</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Vapour pressure</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Vapour density</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Relative density</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Solubility</b>	: AffinityScript Multi-Temp RT  10X AffinityScript RT Buffer  100 mM DTT	Soluble in the following materials: cold water and hot water.  Easily soluble in the following materials: cold water and hot water.  Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Decomposition temperature</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.
<b>Viscosity</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: AffinityScript Multi-Temp RT  10X AffinityScript RT Buffer  100 mM DTT	No specific test data related to reactivity available for this product or its ingredients.  No specific test data related to reactivity available for this product or its ingredients.  No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	The product is stable. The product is stable. The product is stable.
<b>Possibility of hazardous reactions</b>	: AffinityScript Multi-Temp RT  10X AffinityScript RT Buffer  100 mM DTT	Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Incompatible materials</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.

## Section 10. Stability and reactivity

<b>Hazardous decomposition products</b>	: AffinityScript Multi-Temp RT	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10X AffinityScript RT Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	100 mM DTT	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
AffinityScript Multi-Temp RT Glycerol	LD50 Oral	Rat	12600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
AffinityScript Multi-Temp RT Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

#### Sensitisation

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.

<b>Information on likely routes of exposure</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation.
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#### Potential acute health effects

<b>Eye contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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## Section 11. Toxicological information

<b>Inhalation</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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

<b>Eye contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Inhalation</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No specific data. No specific data. No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Potential chronic health effects

<b>General</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Developmental effects</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: AffinityScript Multi-Temp RT 10X AffinityScript RT Buffer 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Route	ATE value
100 mM DTT Oral	33333.3 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
AffinityScript Multi-Temp RT Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
AffinityScript Multi-Temp RT Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
AffinityScript Multi-Temp RT Glycerol	-1.76	-	low

### Mobility in soil

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

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**ADG / IMDG / IATA** : Not regulated as Dangerous Goods according to the ADG Code .

**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 Annex II of Marpol and the IBC Code** : Not available.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### International regulations

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

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

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

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<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>	: All components are listed or exempted.
<b>Viet Nam</b>	: Not determined.

## Section 16. Any other relevant information

### History

**Date of issue/Date of revision** : 15/07/2018

**Date of previous issue** : 19/05/2017

**Version** : 6

### Key to abbreviations

: ADG = Australian Dangerous Goods  
 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)  
 NOHSC = National Occupational Health and Safety Commission  
 SUSMP = Standard Uniform Schedule of Medicine and Poisons  
 UN = United Nations

### Procedure used to derive the classification

Classification	Justification
Not classified.	

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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