

# SAFETY DATA SHEET

## Alien Reference RNA FAM QRT-PCR Detection Kit

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

#### 1.1 Product identifier

<b>Product name</b>	: Alien Reference RNA FAM QRT-PCR Detection Kit		
<b>Part no. (chemical kit)</b>	: 300602		
<b>Part no.</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	300600-13	
	: Alien Probe Forward Primer	300602-51	
	: Alien Probe Reverse Primer	300602-52	
	: Alien Probe (FAM)	300602-53	

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

<b>Identified uses</b>	: Analytical reagent.		
	: Alien RNA Transcript 3 x 10E10 copies/µl	0.02 ml (20 µl)	
	: Alien Probe Forward Primer	0.1 ml (2.5 µM 100 µl)	
	: Alien Probe Reverse Primer	0.1 ml (2.5 µM 100 µl)	
	: Alien Probe (FAM)	0.1 ml (4 µM 100 µl)	
<b>Uses advised against</b>	: None known.		

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

Agilent Technologies Deutschland GmbH  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

#### 1.4 Emergency telephone number

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

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

<b>Product definition</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Mixture
	: Alien Probe Forward Primer	Mixture
	: Alien Probe Reverse Primer	Mixture
	: Alien Probe (FAM)	Mixture

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

Not classified.

Alien RNA Transcript 3 x 10E10 copies/µl	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Alien Probe Forward Primer	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Alien Probe Reverse Primer	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Alien Probe (FAM)	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

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

**SECTION 2: Hazards identification****2.2 Label elements**

<b>Signal word</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No signal word. No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Alien RNA Transcript 3 x 10E10 copies/ $\mu$ l Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.

**Special packaging requirements**

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**SECTION 2: Hazards identification**

<b>Tactile warning of danger</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not applicable. Not applicable. Not applicable. Not applicable.
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**2.3 Other hazards**

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
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<b>Other hazards which do not result in classification</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	None known. None known. None known. None known.
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**SECTION 3: Composition/information on ingredients**

<b>3.1 Substances</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Mixture Mixture Mixture Mixture
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There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl  Alien Probe Forward Primer  Alien Probe Reverse Primer  Alien Probe (FAM)	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. 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>	: Alien RNA Transcript 3 x 10E10 copies/µl  Alien Probe Forward Primer  Alien Probe Reverse Primer  Alien Probe (FAM)	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. 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.

## SECTION 4: First aid measures

<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe Forward Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe Reverse Primer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Alien Probe (FAM)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Alien Probe Forward Primer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Alien Probe Reverse Primer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Alien Probe (FAM)	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
<b>Protection of first-aiders</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe Forward Primer	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe Reverse Primer	No action shall be taken involving any personal risk or without suitable training.
	Alien Probe (FAM)	No action shall be taken involving any personal risk or without suitable training.

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

#### Potential acute health effects

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

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**SECTION 4: First aid measures**

<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	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.

**Over-exposure signs/symptoms**

<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific data. No specific data. No specific data. No specific data.
<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific data. No specific data. No specific data. No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Notes to physician</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No specific treatment. No specific treatment. No specific treatment. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	Use an extinguishing agent suitable for the surrounding fire.
	Alien Probe Forward Primer	Use an extinguishing agent suitable for the surrounding fire.
	Alien Probe Reverse Primer	Use an extinguishing agent suitable for the surrounding fire.
	Alien Probe (FAM)	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	None known.
	Alien Probe Forward Primer	None known.
	Alien Probe Reverse Primer	None known.
	Alien Probe (FAM)	None known.

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

<b>Hazards from the substance or mixture</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	In a fire or if heated, a pressure increase will occur and the container may burst.
	Alien Probe Forward Primer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Alien Probe Reverse Primer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Alien Probe (FAM)	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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>	: Alien RNA Transcript 3 x 10E10 copies/μl	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Alien Probe Forward Primer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Alien Probe Reverse Primer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

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**SECTION 5: Firefighting measures**

Alien Probe (FAM)

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

**SECTION 6: Accidental release measures**

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

**For non-emergency personnel**

: Alien RNA Transcript 3 x 10E10 copies/μl

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.

Alien Probe Forward Primer

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.

Alien Probe Reverse Primer

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.

Alien Probe (FAM)

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

**For emergency responders**

: Alien RNA Transcript 3 x 10E10 copies/μl

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".

Alien Probe Forward Primer

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".

Alien Probe Reverse Primer

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".

Alien Probe (FAM)

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".

**6.2 Environmental precautions**

: Alien RNA Transcript 3 x 10E10 copies/μl

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).

Alien Probe Forward Primer

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).

Alien Probe Reverse Primer

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).

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**SECTION 6: Accidental release measures**

Alien Probe (FAM)	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).
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**6.3 Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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.
	Alien Probe (FAM)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

<b>Protective measures</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: Alien RNA Transcript 3 x 10E10 copies/µl  Alien Probe Forward Primer  Alien Probe Reverse Primer  Alien Probe (FAM)	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. 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. 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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

## SECTION 7: Handling and storage

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

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

#### Storage

: Alien RNA Transcript 3 x 10E10 copies/µl	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.
Alien Probe Forward Primer	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.
Alien Probe Reverse Primer	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.
Alien Probe (FAM)	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.

### 7.3 Specific end use(s)

#### Recommendations

: Alien RNA Transcript 3 x 10E10 copies/µl	Industrial applications, Professional applications.
Alien Probe Forward Primer	Industrial applications, Professional applications.
Alien Probe Reverse Primer	Industrial applications, Professional applications.
Alien Probe (FAM)	Industrial applications, Professional applications.

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**SECTION 7: Handling and storage**

<b>Industrial sector specific solutions</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Not available.
	Alien Probe Forward Primer	Not available.
	Alien Probe Reverse Primer	Not available.
	Alien Probe (FAM)	Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational exposure limits**

No exposure limit value known.

**Biological exposure indices**

No exposure indices known.

**Recommended monitoring procedures**

: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

**8.2 Exposure controls**

**Appropriate engineering controls**

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

**Individual protection measures**

**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.

## SECTION 8: Exposure controls/personal protection

- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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

### 9.1 Information on basic physical and chemical properties

#### Appearance

- |  |  |                |
|--|--|----------------|
| <b>Physical state</b>                          | : Alien RNA Transcript 3 x 10E10 copies/µl | Liquid.        |
|  | Alien Probe Forward Primer                 | Liquid.        |
|  | Alien Probe Reverse Primer                 | Liquid.        |
|  | Alien Probe (FAM)                          | Liquid.        |
| <b>Colour</b>                                  | : Alien RNA Transcript 3 x 10E10 copies/µl | Not available. |
|  | Alien Probe Forward Primer                 | Not available. |
|  | Alien Probe Reverse Primer                 | Not available. |
|  | Alien Probe (FAM)                          | Not available. |
| <b>Odour</b>                                   | : Alien RNA Transcript 3 x 10E10 copies/µl | Not available. |
|  | Alien Probe Forward Primer                 | Not available. |
|  | Alien Probe Reverse Primer                 | Not available. |
|  | Alien Probe (FAM)                          | Not available. |
| <b>Odour threshold</b>                         | : Alien RNA Transcript 3 x 10E10 copies/µl | Not available. |
|  | Alien Probe Forward Primer                 | Not available. |
|  | Alien Probe Reverse Primer                 | Not available. |
|  | Alien Probe (FAM)                          | Not available. |
| <b>Melting point/freezing point</b>            | : Alien RNA Transcript 3 x 10E10 copies/µl | 0°C            |
|  | Alien Probe Forward Primer                 | 0°C            |
|  | Alien Probe Reverse Primer                 | 0°C            |
|  | Alien Probe (FAM)                          | 0°C            |
| <b>Initial boiling point and boiling range</b> | : Alien RNA Transcript 3 x 10E10 copies/µl | 100°C          |
|  | Alien Probe Forward Primer                 | 100°C          |
|  | Alien Probe Reverse Primer                 | 100°C          |
|  | Alien Probe (FAM)                          | 100°C          |

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**SECTION 9: Physical and chemical properties**

**Flammability** : Alien RNA Transcript 3 x 10E10 copies/µl Not applicable.  
 Alien Probe Forward Primer Not applicable.  
 Alien Probe Reverse Primer Not applicable.  
 Alien Probe (FAM) Not applicable.

**Upper/lower flammability or explosive limits** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Flash point** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**pH** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer 7.5  
 Alien Probe Reverse Primer 7.5  
 Alien Probe (FAM) 7.5

**Viscosity** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

<b>Solubility(ies)</b>	<b>Media</b>	<b>Result</b>
	<b>Alien RNA Transcript 3 x 10E10 copies/µl</b> water	Soluble
	<b>Alien Probe Forward Primer</b> water	Soluble
	<b>Alien Probe Reverse Primer</b> water	Soluble
	<b>Alien Probe (FAM)</b> water	Soluble

**Partition coefficient: n-octanol/water** : Alien RNA Transcript 3 x 10E10 copies/µl Not applicable.  
 Alien Probe Forward Primer Not applicable.  
 Alien Probe Reverse Primer Not applicable.  
 Alien Probe (FAM) Not applicable.

**Vapour pressure** :

**SECTION 9: Physical and chemical properties**

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>Alien RNA Transcript 3 x 10E10 copies/µl</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Alien Probe Forward Primer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Alien Probe Reverse Primer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Alien Probe (FAM)</b>						
water	17.5	2.3	-	92.258	12.3	-

**Evaporation rate** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Relative density** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Vapour density** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Explosive properties** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Oxidising properties** : Alien RNA Transcript 3 x 10E10 copies/µl Not available.  
 Alien Probe Forward Primer Not available.  
 Alien Probe Reverse Primer Not available.  
 Alien Probe (FAM) Not available.

**Particle characteristics**

**Alien Reference RNA FAM QRT-PCR Detection Kit**

**SECTION 9: Physical and chemical properties**

<b>Median particle size</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Not applicable.
	Alien Probe Forward Primer	Not applicable.
	Alien Probe Reverse Primer	Not applicable.
	Alien Probe (FAM)	Not applicable.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe Forward Primer	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe Reverse Primer	No specific test data related to reactivity available for this product or its ingredients.
	Alien Probe (FAM)	No specific test data related to reactivity available for this product or its ingredients.

<b>10.2 Chemical stability</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	The product is stable.
	Alien Probe Forward Primer	The product is stable.
	Alien Probe Reverse Primer	The product is stable.
	Alien Probe (FAM)	The product is stable.

<b>10.3 Possibility of hazardous reactions</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe Forward Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe Reverse Primer	Under normal conditions of storage and use, hazardous reactions will not occur.
	Alien Probe (FAM)	Under normal conditions of storage and use, hazardous reactions will not occur.

<b>10.4 Conditions to avoid</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.

<b>10.5 Incompatible materials</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	May react or be incompatible with oxidising materials.
	Alien Probe Forward Primer	May react or be incompatible with oxidising materials.
	Alien Probe Reverse Primer	May react or be incompatible with oxidising materials.
	Alien Probe (FAM)	May react or be incompatible with oxidising materials.

**Alien Reference RNA FAM QRT-PCR Detection Kit**

**SECTION 10: Stability and reactivity**

<b>10.6 Hazardous decomposition products</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute toxicity

Not available.

Acute toxicity estimates

N/A

Irritation/Corrosion

**Conclusion/Summary** : Not available.

Sensitiser

**Conclusion/Summary** : Not available.

Mutagenicity

**Conclusion/Summary** : Not available.

Carcinogenicity

**Conclusion/Summary** : Not available.

Reproductive toxicity

**Conclusion/Summary** : Not available.

Teratogenicity

**Conclusion/Summary** : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

**Information on likely routes of exposure**

: Alien RNA Transcript 3 x 10E10 copies/µl	Not available.
Alien Probe Forward Primer	Not available.
Alien Probe Reverse Primer	Not available.
Alien Probe (FAM)	Not available.

Potential acute health effects

<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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**SECTION 11: Toxicological information**

<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

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

<b>Inhalation</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Ingestion</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Skin contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.
<b>Eye contact</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	No specific data.
	Alien Probe Forward Primer	No specific data.
	Alien Probe Reverse Primer	No specific data.
	Alien Probe (FAM)	No specific data.

**Delayed and immediate effects as well as 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.

## SECTION 11: Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

**Conclusion/Summary** : Not available.

<b>General</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: Alien RNA Transcript 3 x 10E10 copies/μl	No known significant effects or critical hazards.
	Alien Probe Forward Primer	No known significant effects or critical hazards.
	Alien Probe Reverse Primer	No known significant effects or critical hazards.
	Alien Probe (FAM)	No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

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

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

## SECTION 12: Ecological information

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

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

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

#### Packaging

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

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

## SECTION 14: Transport information

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

### Additional information

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

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

## SECTION 15: Regulatory information

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

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

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

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

No listed substance

<b>Label</b>	: Alien RNA Transcript 3 x 10E10 copies/µl	Not applicable.
	Alien Probe Forward Primer	Not applicable.
	Alien Probe Reverse Primer	Not applicable.
	Alien Probe (FAM)	Not applicable.

#### Other EU regulations

##### Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

##### Persistent Organic Pollutants

Not listed.

##### Seveso Directive

This product is not controlled under the Seveso Directive.

#### International regulations

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

Not listed.

##### Montreal Protocol

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

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

Not listed.

#### Inventory list

<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>Eurasian Economic Union</b>	: <b>Russian Federation inventory</b> : All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (CSCL)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.

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**SECTION 15: Regulatory information**

- Thailand** : Not determined.
- Turkey** : Not determined.
- United States** : All components are active or exempted.
- Viet Nam** : All components are listed or exempted.

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

**SECTION 16: Other information**

✔ Indicates information that has changed from previously issued version.

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

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

Classification	Justification
Not classified.	

**Full text of abbreviated H statements**

Not applicable.

**Full text of classifications [CLP/GHS]**

Not applicable.

- Date of issue/ Date of revision** : 15/07/2024
- Date of previous issue** : No previous validation
- Version** : 1

**Notice to reader**

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