

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

Product name	: <input checked="" type="checkbox"/> Alien Reference RNA FAM QRT-PCR Detection Kit
Part no. (chemical kit)	: 300602
Part no.	: 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

Identified uses	: <input checked="" type="checkbox"/> Analytical reagent.
	<input checked="" type="checkbox"/> 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)
Uses advised against	: None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
 5500 Lakeside Cheadle Royal Business Park,
 Cheadle, Cheshire, SK8 3GR
 United Kingdom
 Tel: +44 (0) 345 712 5292
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	: 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.

<input checked="" type="checkbox"/> Alien RNA Transcript 3 x 10E10 copies/μl	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Alien Probe Forward Primer	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Alien Probe Reverse Primer	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Alien Probe (FAM)	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

SECTION 2: Hazards identification

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

2.2 Label elements

Signal word	:	Alien RNA Transcript 3 x 10E10 copies/µl	No signal word.
		Alien Probe Forward Primer	No signal word.
		Alien Probe Reverse Primer	No signal word.
		Alien Probe (FAM)	No signal word.
Hazard statements	:	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.
Precautionary statements			
Prevention	:	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.
Response	:	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.
Storage	:	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.
Disposal	:	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.
Supplemental label elements	:	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.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	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.

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SECTION 2: Hazards identification

Special packaging requirements

Containers to be fitted with child-resistant fastenings	: 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.
Tactile warning of danger	: 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.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: Alien RNA Transcript 3 x 10E10 copies/µl	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Alien Probe Forward Primer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Alien Probe Reverse Primer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Alien Probe (FAM)	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification	: 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.

SECTION 3: Composition/information on ingredients

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

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

Eye contact	: Alien RNA Transcript 3 x 10E10 copies/µl	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.
	Alien Probe Forward Primer	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.
	Alien Probe Reverse Primer	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.
	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.

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SECTION 4: First aid measures

Inhalation	: Alien RNA Transcript 3 x 10E10 copies/μl	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Alien Probe Forward Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Alien Probe Reverse Primer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Alien Probe (FAM)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: 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.
Ingestion	: 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.
Protection of first-aiders	: 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

Over-exposure signs/symptoms

Eye contact	: 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.

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SECTION 4: First aid measures

Inhalation	:	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.
Skin contact	:	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.
Ingestion	:	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

Notes to physician	:	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.
Specific treatments	:	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

Suitable extinguishing media	:	Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	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.

5.2 Special hazards arising from the substance or mixture

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SECTION 5: Firefighting measures

Hazards from the substance or mixture	: 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.
Hazardous combustion products	: 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

Special protective actions for fire-fighters	: 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	
	Alien Probe Reverse Primer	
	Alien Probe (FAM)	
Special protective equipment for fire-fighters	: 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.
	Alien Probe Forward Primer	
	Alien Probe Reverse Primer	
	Alien Probe (FAM)	

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.

SECTION 6: Accidental release measures

		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).
	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).
6.3 Methods and material for containment and cleaning up		
Methods for cleaning up	: 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

Protective measures	: 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).
Advice on general occupational hygiene	: 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. 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 Alien Probe Forward Primer 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. 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. 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
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SECTION 7: Handling and storage

Alien Probe (FAM)

appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
 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.
Industrial sector specific solutions	: 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 appropriate monitoring standards. 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.

SECTION 8: Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Alien RNA Transcript 3 x 10E10 copies/µl Liquid.
 Alien Probe Forward Primer Liquid.
 Alien Probe Reverse Primer Liquid.
 Alien Probe (FAM) Liquid.
- Colour** : 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.
- Odour** : 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.
- Odour threshold** : 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.

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SECTION 9: Physical and chemical properties

Melting point/freezing point	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	0°C 0°C 0°C 0°C
Initial boiling point and boiling range	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	100°C 100°C 100°C 100°C
Flammability	: 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.
Upper/lower flammability or explosive limits	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
Flash point	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
Auto-ignition temperature	: <input checked="" type="checkbox"/> Not available.	
Decomposition temperature	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
pH	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. 7.5 7.5 7.5
Viscosity	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.

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SECTION 9: Physical and chemical properties

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

Partition coefficient: n-octanol/water	Media	Result
	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	Ingredient name	Vapour Pressure at 20° C			Vapour pressure at 50° C		
		mm Hg	kPa	Method	mm Hg	kPa	Method
	Alien RNA Transcript 3 x 10E10 copies/µl water	17.5	2.3	-	92.258	12.3	-
	Alien Probe Forward Primer water	17.5	2.3	-	92.258	12.3	-
	Alien Probe Reverse Primer water	17.5	2.3	-	92.258	12.3	-
	Alien Probe (FAM) water	17.5	2.3	-	92.258	12.3	-

Evaporation rate	Media	Result
	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	Media	Result
	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.

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SECTION 9: Physical and chemical properties

Vapour density	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
Explosive properties	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
Oxidising properties	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	Not available. Not available. Not available. Not available.
Particle characteristics		
Median particle size	: 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.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	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. No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Alien RNA Transcript 3 x 10E10 copies/µl Alien Probe Forward Primer Alien Probe Reverse Primer Alien Probe (FAM)	The product is stable. The product is stable. The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	: 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 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. Under normal conditions of storage and use, hazardous reactions will not occur.

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SECTION 10: Stability and reactivity

10.4 Conditions to avoid	: 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.
10.5 Incompatible materials	: 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.
10.6 Hazardous decomposition products	: Alien RNA Transcript 3 x 10E10 copies/µl	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Alien Probe Forward Primer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Alien Probe Reverse Primer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Alien Probe (FAM)	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

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.

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SECTION 11: Toxicological information

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

Inhalation : 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.

Ingestion : 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.

Skin contact : 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.

Eye contact : 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

Inhalation : 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.

Ingestion : 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.

Skin contact : 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.

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Eye contact : **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.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General : **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.

Carcinogenicity : **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.

Mutagenicity : **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.

Reproductive toxicity : **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.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

Packaging

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

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

SECTION 14: Transport information

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

Additional information

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

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SECTION 14: Transport information

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
UK (GB)/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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

No listed substance

Label	:	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.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

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

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.

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SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

United States : All components are active or exempted.

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

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications

Not applicable.

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