Material Safety Data Sheet

1. Company/Undertaking Identification

Supplier:	Life Technologies 5791 VAN ALLEN WAY PO BOX 6482 CARLSBAD, CA 92008 +1 760 603 7200 LIFE TECHNOLOGIES LIMITED 3 FOUNTAIN DRIVE INCHINNAN BUSINESS PARK PAISLEY, PA4 9RF SCOTLAND 44-141 814-6100
24 hour Emergency Response:	866-536-0631 301-431-8585 Outside of the U.S. ++1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses

2. Identification of the substance/mixture

Product name:	**RapidFinder™ Quant Equine Kit**
Product components:	Animal Master Mix General Master Mix Equine Standard
References:	Individual references are not available
Product code:	A15579

3. *Hazards Identification*

In accordance with local and national regulations,

The product is classified and labelled in accordance with Directive 1999/45/EC. REGULATION (EC) No 1272/2008. Classification according to EU Directives 67/548/EEC or 1999/45/EC.

Principle Routes of Exposure/Potential Health effects

Eyes	May cause eye irritation with susceptible persons.
Inhalation	May be harmful by inhalation.
Skin	May cause skin irritation in susceptible persons.
Ingestion	May be harmful if swallowed.

Specific effects

Carcinogenic effects:	*none*
Mutagenic effects:	*none*
Reproductive toxicity:	*none*
Sensitisation:	*none*
Target Organ Effects:	*No known effects under normal use conditions*

Fire-fighting measures

Suitable extinguishing media	Water Foam Dry chemical Carbon dioxide (CO2) Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Hazardous decomposition Products	Carbon oxides
Special protective equipment for fire-fighters	Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Accidental release measures

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental precautions	Try to prevent the material from entering drains or water courses.
Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material place in container for disposal according to local/national regulations (see section 13).

Handling and storage

Precautions for safe handling	*Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment.*
Storage conditions	*See product label for specific storage requirements.*

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit: *We are not aware of any national exposure limit.*

Eye protection	Safety glasses with side-shields.
Hand protection	Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Respiratory protection	Provide adequate ventilation.
Skin protection	Lab coat

Physical and chemical properties

Physical state: *liquid*
Colour: *This information is not available.*
Odour: *This information is not available.*
Odour Threshold: *This information is not available.*
pH: *This information is not available.*

Boiling point: *This information is not available.*
Melting point: *This information is not available.*
Vapour pressure: *This information is not available.*
Water solubility: *This information is not available.*
Flash point: *This information is not available.*
Explosion limits: *This information is not available.*
Density: *This information is not available.*
Percent volatile: *This information is not available.*
Volatile organic compounds (VOC) content: *This information is not available.*

Stability and reactivity

Hazardous decomposition products: Carbon oxides

Toxicological information

No data available.

Further information: *There is no data available for this product.*

Ecological information

We have no quantitative data concerning the ecological effects of this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Disposal methods

Dispose of in accordance with local regulations.

Transport information

IATA-DGR	Not dangerous goods
IMDG	Not dangerous goods
ADR	Not dangerous goods

Regulatory information

Labelling

Under Directive 1999/45/EC, this component does not need to be classified nor labelled.

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES (EINECS):

All components of this substance are listed on or are exempt from the inventory.

Other information

Disclaimer: This MSDS has been prepared using information from sources considered technically reliable. It should not be relied upon as a product specification. The company makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or in combination with other chemical substances. Every user of the product is responsible for evaluating its own processes and conditions of use and selecting appropriate protective measures for employee exposure.

Product name:	**RapidFinder™ Quant Equine Kit**
Component name:	Equine Standard
Reference:	Individual references are not available
Product code:	A15579

Composition/information on ingredients

This product is not hazardous according to 29 CFR 1910.1200 (OSHA Hazard Communication Standard).

First aid measures

Eye contact:	*Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.*
Inhalation:	*Move to fresh air. If symptoms persist, call a physician.*
Skin contact:	*Rinse with plenty of water. If symptoms arise, call a physician.*
Ingestión:	*If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth with water. Never give anything by mouth to an unconscious person.* *Get medical attention if symptoms occur.*

Fire-fighting measures

Suitable extinguishing media:	Water Foam Dry chemical Carbon dioxide (CO2) Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous decomposition products:	Carbon oxides
Special protective equipment for fire-fighters:	Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Accidental release measures

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental precautions	Try to prevent the material from entering drains or water courses.
Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material place in container for disposal according to local/national regulations (see section 13).

Handling and storage

Precautions for safe handling	Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment.
Storage conditions	See product label for specific storage requirements.

Exposure controls/personal protection

Exposure limit: *We are not aware of any national exposure limit.*

Eye protection	*Safety glasses with side-shields.*
Hand protection	*Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.*
Respiratory protection	*Provide adequate ventilation.*
Skin protection	*Lab coat*

Physical and chemical properties

Physical state: *liquid*
Colour: *This information is not available.*
Odour: *This information is not available.*
Odour Threshold: *This information is not available.*
pH: *This information is not available.*
Boiling point: *This information is not available.*
Melting point: *This information is not available.*
Vapour pressure: *This information is not available.*
Water solubility: *This information is not available.*
Flash point: *This information is not available.*
Explosion limits: *This information is not available.*
Density: *This information is not available.*
Percent volatile: *This information is not available.*
Volatile organic compounds (VOC) content: *This information is not available.*

Stability and reactivity

Hazardous decomposition products	Carbon oxides

Toxicological information

No data available.

Further information

There is no data available for this product.

Ecological information

We have no quantitative data concerning the ecological effects of this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Disposal methods

Dispose of in accordance with local regulations.

Transport information

IATA-DGR	Not dangerous goods
IMDG	Not dangerous goods
ADR	Not dangerous goods

Regulatory information

Labelling

Under Directive 1999/45/EC, this component does not need to be classified nor labelled.

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES (EINECS):

All components of this substance are listed on or are exempt from the inventory.

Other information

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Product name:	**RapidFinder™ Quant Equine Set**
Component name:	General Master Mix
Reference:	Individual references are not available
Product code:	A15579

Composition/information on ingredients

Hazardous components	CAS-No.	EC-No.(EINECS-No.)	Weight %	Classification
Registered mark	Owner		1-10%	Xi R36/37/38 Irritant

Hazards identification

In accordance with Directive 1999/45/EC, the product does not need to be classified nor labelled.

First aid measures

Eye contact Immediately flush eyes for at least 15 minutes. Get medical attention.

Inhalation Remove to fresh air immediately. Get medical attention immediately. If not breathing, give artificial respiration.

Skin contact Rinse immediately with plenty of water and seek medical advice.
Remove and wash contaminated clothing before re-use.

Ingestion If swallowed, call a poison control centre or doctor immediately. Never give anything by mouth to an unconscious person.

Fire-fighting measures

Suitable extinguishing media:	Water Foam Dry chemical Carbon dioxide (CO2)
Hazardous decomposition Products:	Carbon oxides Nitrogen oxides (NOx)
Special protective equipment for fire-fighters:	Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Accidental release measures

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray
Environmental precautions	Should not be released into the environment. Prevent product from entering drains.
Methods for cleaning up	Clean contaminated floors and objects thoroughly while observing environmental regulations. Ensure adequate ventilation.

Handling and storage

Precautions for safe handling	Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.
Storage conditions	Protect against physical damage. Isolate from incompatible substances. Store in original container. See product label for specific storage requirements.

Exposure controls/personal protection

Hazardous components	Regulation	Type of listing	Value
Sodium Azide	Spain	VLA-ED	0.1 mg/m^3
	Spain	VLA-EC	0.3 mg/m^3
	Spain	VLA-EC vapor	0.18 mg/m^3 0.1 ppm
Hydrazoic acid	European Union-IOELVs	STEL	0.3 mg/m^3
	European Union -IOELVs	TWA	0.1 mg/m^3
Glycerol	United Kingdom	STELmist	30 mg/m^3
	United Kingdom	TWAmist	10 mg/m^3

Personal protection

Eye protection	Chemical resistant goggles must be worn. Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection	Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Respiratory protection	Avoid breathing vapors, mist or gas. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. For unknown concentrations or Immediately. Dangerous to Life or Health (IDLH), use a full-facepiece positive pressure air supplied respirator.
Skin protection	Wear suitable protective clothing.
Engineering measures	Maintain air concentrations below occupational exposure standards. Use only in area provided with appropriate exhaust ventilation.

Physical and chemical properties

Physical state: *liquid*
Colour: *This information is not available.*
Odour: *This information is not available.*
Odour Threshold: *This information is not available.*
pH: *This information is not available.*
Boiling point: *This information is not available.*
Melting point: *This information is not available.*
Vapour pressure: *This information is not available.*
Water solubility: *This information is not available.*

Flash point: *This information is not available.*
Explosion limits: *This information is not available.*
Density: *This information is not available.*
Percent volatile: *This information is not available.*
Volatile organic compounds (VOC) content: *This information is not available.*

Stability and reactivity

Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition
Materials to avoid	Strong oxidizing agents, Bases
Hazardous decomposition products:	Nitrogen oxides (NOx), Carbon oxides

Toxicology information

Hazardous components without disposable information: *Propietary*
Hazardous components: *Propietary*
Acute oral toxicity: *DL50 rat 12,600 mg/kg*
Acute inhalation toxicity: *CL50 rat 1 h > 570 mg/m3*
Acute dermal toxicity: *DL50 rat > 21,900 mg/kg*

Ecological information

We have no quantitative data concerning the ecological effects of this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Propietary Component:

Toxicity to fis: *LC50 Oncorhynchus mykiss (rainbow trout) 96 h*
51,000 - 57,000 mg/L
Toxicity to daphnia: *EC50 Daphnia magna (Water flea) 24 h > 500 mg/L*

Disposal considerations

Environmental precautions:
Should not be released into the environment. Prevent product from entering drains.

Disposal methods
Dispose of in accordance with local regulations.

General advice:
DISPOSAL CONSIDERATIONS. *The product has to be disposed of as laboratory chemical in accordance with local regulations.*

Transport information

IATA-DGR	*Not dangerous goods*
IMDG	*Not dangerous goods*
ADR	*Not dangerous goods*

Regulatory information

Labelling: *In accordance with Directive 1999/45/EC, the product does not need to be classified nor labelled.*

National Inventory Status – European Union

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES (EINECS)
All components of this substance are listed on or are exempt from the inventory.

EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES (ELINCS)
All components of this substance are listed on or are exempt from the inventory.

EUROPEAN NO-LONGER POLYMERS LIST (NLP)
All components of this substance are listed on or are exempt from the inventory.

Other information

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Text of R-phrases mentioned in Section 2
R22 Harmful if swallowed.
R36/37/38, R52 Irritating to eyes, respiratory system and skin. Harmful to aquatic organisms.

Product name:	**RapidFinder™ Quant Equine Kit**
Component name:	Animal Master Mix
Reference:	Individual references are not available
Product code:	A15579

Composition/information on ingredients

This product is not hazardous according to 29 CFR 1910.1200 (OSHA Hazard Communication Standard).

First aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Skin contact	Rinse with plenty of water. If symptoms arise, call a physician.
Ingestión	If swallowed, DO NOT induces vomiting unless directed to do so by medical personnel. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Fire-fighting measures

Suitable extinguishing media:	Water Foam Dry chemical Carbon dioxide (CO2) Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous decomposition Products:	Carbon oxides
Special protective equipment for fire-fighters:	Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Accidental release measures

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental precautions	Try to prevent the material from entering drains or water courses.
Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material place in container for disposal according to local/national regulations (see section 13).

Handling and storage

Precautions for safe handling	Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment.
Storage conditions	See product label for specific storage requirements.

Exposure controls/personal protection

Exposure limit: *We are not aware of any national exposure limit.*

Eye protection	Safety glasses with side-shields.
Hand protection	Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Respiratory protection	Provide adequate ventilation.
Skin protection	Lab coat

Physical and chemical properties

Physical state: *liquid*
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Vapour pressure: *This information is not available.*
Water solubility: *This information is not available.*
Flash point: *This information is not available.*
Explosion limits: *This information is not available.*
Density: *This information is not available.*
Percent volatile: *This information is not available.*
Volatile organic compounds (VOC) content: *This information is not available.*

Stability and reactivity

Hazardous decomposition products	Carbon oxides

Toxicological information

No data available.

Further information

There is no data available for this product.

Ecological information

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Environmental precautions

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Disposal methods

Dispose of in accordance with local regulations.

TRANSPORT INFORMATION

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