

## 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:** TaqMan GMO Maize Quantification kit  
**Product components:** P35S Master Mix  
Maize Master Mix  
General Master Mix  
2 x 10<sup>5</sup> P35S Standard

**References:** Individual references are not available  
**Product code:** 4481972

### 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*

<b>Eyes</b>	May cause eye irritation with susceptible persons.
<b>Inhalation</b>	May be harmful by inhalation.
<b>Skin</b>	May cause skin irritation in susceptible persons.
<b>Ingestion</b>	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 [CO<sub>2</sub>]

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*

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

### *Exposure controls/personal protection*

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

<b>Eye protection</b>	Safety glasses with side-shields
<b>Hand protection</b>	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.
<b>Respiratory protection</b>	Provide adequate ventilation.
<b>Skin protection</b>	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**

<b>IATA-DGR</b>	<i>Not dangerous goods</i>
<b>IMDG</b>	<i>Not dangerous goods</i>
<b>ADR</b>	<i>Not dangerous goods</i>

#### **Regulatory information**

##### **Labeling**

*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.*

<b>Product name:</b>	TaqMan GMO Maize Quantification kit
<b>Component name:</b>	Water
<b>Reference:</b>	Individual references are not available
<b>Product code:</b>	4481972

### *Composition/information on ingredients*

*This product is not hazardous according to 29 CFR 1910.1200 [OSHA Hazard Communication Standard].*

### *First aid measures*

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Skin contact</b>	Rinse with plenty of water. If symptoms arise, call a physician.
<b>Ingestión</b>	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 (CO<sub>2</sub>)  
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**

<b>IATA-DGR</b>	<i>Not dangerous goods</i>
<b>IMDG</b>	<i>Not dangerous goods</i>
<b>ADR</b>	<i>Not dangerous goods</i>

#### **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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<b>Product name:</b>	TaqMan GMO Maize Quantification kit
<b>Components name:</b>	General Master Mix
<b>Reference:</b>	Individual references are not available
<b>Product code:</b>	4481972

### 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*

<b>Eye contact</b>	Immediately flush eyes for at least 15 minutes. Get medical attention.
<b>Inhalation</b>	Remove to fresh air immediately. Get medical attention immediately. If not breathing, give artificial respiration.
<b>Skin contact</b>	Rinse immediately with plenty of water and seek medical advice. Remove and wash contaminated clothing before re-use.
<b>Ingestión</b>	If swallowed, call a poison control centre or doctor immediately. Never give anything by mouth to an unconscious person.

*Fire-fighting measures*

<b>Suitable extinguishing media</b>	Water Foam Dry chemical Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous decomposition products</b>	Carbon oxides Nitrogen oxides (NO <sub>x</sub> )
<b>Special protective equipment for fire-fighters</b>	Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

*Accidental release measures*

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray
<b>Environmental precautions</b>	Should not be released into the environment. Prevent product from entering drains.
<b>Methods for cleaning up</b>	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 <sup>3</sup>
	Spain	VLA-EC	0.3 mg/m <sup>3</sup>
	Spain	VLA-EC vapor	0.18 mg/m <sup>3</sup> 0.1 ppm
Hydrazoic acid	European Union-IOELVs	STEL	0.3 mg/m <sup>3</sup>
	European Union -IOELVs	TWA	0.1 mg/m <sup>3</sup>
Glycerol	United Kingdom	STELmist	30 mg/m <sup>3</sup>
	United Kingdom	TWAmist	10 mg/m <sup>3</sup>

### *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.

<b>Respiratory protection</b>	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.
<b>Skin protection</b>	Wear suitable protective clothing.
<b>Engineering measures</b>	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*

<b>Conditions to avoid</b>	Keep away from open flames, hot surfaces and sources of ignition
<b>Materials to avoid</b>	Strong oxidizing agents, Bases
<b>Hazardous decomposition products</b>	Nitrogen oxides (NO <sub>x</sub> ), Carbon oxides

### *Toxicology information*

*Hazardous components without disposable information:* Proprietary

*Hazardous components:* Proprietary

*Acute oral toxicity: DL50 rat 12,600 mg/kg*

*Acute inhalation toxicity: CL50 rat 1 h > 570 mg/m<sup>3</sup>*

*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.*

### *Proprietary 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***

<b><i>IATA-DGR</i></b>	<i>Not dangerous goods</i>
<b><i>IMDG</i></b>	<i>Not dangerous goods</i>
<b><i>ADR</i></b>	<i>Not dangerous goods</i>

***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.*