

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)

**Manufacturer or supplier's details**Company : Quanta BioSciences, Inc.  
202 Perry Parkway, Suite 1  
Gaithersburg, MD 20877  
USA

Telephone : + 1 301-956-1670

E-mail address :  
Responsible/issuing person :  
Emergency telephone : CHEMTREC: +1 703-527-3887  
number**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Not a hazardous substance or mixture.

**GHS Label element**

Not a hazardous substance or mixture.

**Other hazards which do not result in classification**

No information available.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical Name	CAS-No.	Concentration [%]
propane-1,2-diol	57-55-6	>= 10 - < 30
glycerol	56-81-5	< 10
ammonium chloride	12125-02-9	< 10

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

**SECTION 4. FIRST AID MEASURES**

- General advice : Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.  
If symptoms persist, call a physician.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- If swallowed : If accidentally swallowed obtain immediate medical attention.  
Rinse mouth with water.  
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : No information available.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during firefighting : Exposure to decomposition products may be a hazard to health.
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : In the event of fire and/or explosion do not breathe fumes.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- Methods and materials for : Keep in suitable, closed containers for disposal.

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

containment and cleaning up

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.
- Hygiene measures : Keep away from food and drink.  
When using do not eat, drink or smoke.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA (particulate)	10 mg/m <sup>3</sup>	AU OEL
		TWA (Total (vapour and particles))	150 ppm 474 mg/m <sup>3</sup>	AU OEL
glycerol	56-81-5	TWA (Mist)	10 mg/m <sup>3</sup>	AU OEL
	Further information: This value is for inhalable dust containing no asbestos and < 1% crystalline silica			
ammonium chloride	12125-02-9	TWA (Fumes)	10 mg/m <sup>3</sup>	AU OEL
		STEL (Fumes)	20 mg/m <sup>3</sup>	AU OEL

**Personal protective equipment**

- Hand protection  
Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Eye protection : Safety glasses
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Footwear protecting against chemicals

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Colour	: No data available
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

Possibility of hazardous reactions	: Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available

**Components:****propane-1,2-diol :**

Acute oral toxicity	: LD50 Oral Rat: 20,000 mg/kg
Acute dermal toxicity	: LD50 Dermal Rabbit: 20,800 mg/kg

**glycerol :**

Acute oral toxicity	: LD50 Oral Rat: 12,000 mg/kg
Acute dermal toxicity	: LD50 Dermal Rabbit: 10,000 mg/kg

**ammonium chloride :**

Acute oral toxicity	: LD50 Oral Rat: 1,650 mg/kg
---------------------	------------------------------

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Components:****glycerol:**

Species: Rabbit  
Exposure time: 24 hours

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

Result: Mild skin irritation

**Serious eye damage/eye irritation**

**Product:**

Remarks:  
May irritate eyes.

**Components:**

**glycerol:**

Species: Rabbit  
Exposure time: 24 hours  
Result: Mild eye irritation

**Respiratory or skin sensitisation**

No data available

**Chronic toxicity**

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information**

No data available

---

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

Toxicity to fish : No data available

Toxicity to algae : No data available

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

Toxicity to bacteria : No data available

**Components:****propane-1,2-diol :**Toxicity to fish : NOEC (Pimephales promelas (fathead minnow)): 52,930 mg/l  
Exposure time: 96 hoursToxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 hours**glycerol :**Toxicity to fish : LC0 (Leuciscus idus (Golden orfe)): > 250 mg/l  
Exposure time: 48 hours**ammonium chloride :**Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 209 mg/l  
Exposure time: 96 hoursToxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 161 mg/l  
Exposure time: 48 hours**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

**Disposal methods**

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

**SECTION 14. TRANSPORT INFORMATION****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

**National Regulations****ADG**

Not regulated as a dangerous good

**Special precautions for user :**

Remarks : Not classified as dangerous in the meaning of transport regulations.

---

**SECTION 15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Prohibition/Licensing Requirements : There is no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.

---

**SECTION 16. OTHER INFORMATION**

Date format : dd/mm/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and



**PerfeCTa Multiplex qPCR ToughMix Low ROX (5X)**

Version 1.0

Issuing date: 17.03.2016

Revision Date: 17.07.2015

is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.