



Safety Data Sheet

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name **SYBR[®] Green Realtime PCR Master Mix**
Product Code **QPK-201,201T,209CH**

SUPPLIER

Name **TOYOBO Co., Ltd.**
Address **2-2-8 Dojima Hama Kita-ku Osaka, 530-8230 Japan**
Department **Biotech support Department**
Emergency Telephone No. **+81-6-6348-3786**
Fax No. **+81-6-6348-3833**
Recommended use and restrictions on use **Master Mix for Realtime PCR**

2 HAZARDS IDENTIFICATION

Most Important Hazards **Few adverse human health effects are anticipated. Glycerol whose flash point 160°C is contained.**
Specific Hazard **Not available**
GHS classification **Classification not possible**

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Product **Mixture**
(Substance/Mixture)
Chemical Nature **Aqueous solutions of enzyme, antibody and other compounds.**

| Main components | CAS No. (EC No.) | Concentration |
|--|---------------------|---------------|
| Taq DNA polymerase | (EC 2.7.7.7) | <0.1% |
| Anti-Taq antibodies (monoclonal antibody) | - | <0.1% |
| Bovine Serum Albumin | - | <0.1% |
| Glycerol | 56-81-5 | Ca. 2% |
| Tris(hydroxymethyl) aminomethane | 77-86-1 | <1% |
| Magnesium chloride | 7791-18-6 | <1% |
| Potassium chloride | 7447-40-7 | <1% |
| SYBR [®] Green I | 163795-75-3 | <0.001% |
| ROX reference dye | - | <0.001% |
| deoxyadenosine 5'triphosphate | 1927-32-7 | <1% |
| deoxycytidine 5'triphosphate | 102783-51-7 | |
| deoxyguanosine 5'triphosphate | 93919-41-6 | |
| deoxythymidine 5'triphosphate | 18423-43-3 | |

Components Contributing to the Hazard

| | |
|----------------------|---------------------------------------|
| Common Chemical Name | Glycerol |
| Synonyms | Glycerin |
| Chemical formula | CH ₂ OHCHOHCH ₂ |
| CAS No. | 56-81-5 |
| Concentration | 2% |



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4 FIRST-AID MEASURES

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|--------------|--|
| Inhalation | In case of irritation by inhaling this product, move affected person to fresh air and await recovery. Call a POISON CENTER or doctor if you feel unwell. |
| Skin Contact | Wash with plenty of clean water, immediately. |
| Eye Contact | Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention |
| Ingestion | Try to get the affected person to vomit as much as possible. Seek medical attention, immediately. |

5 FIRE-FIGHTING MEASURES

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|-----------------------------|---|
| Extinguishing Media | Water, Carbon Dioxide, Foam, Dry Chemical Powder |
| Protection of fire-fighters | Fire-fighting should be done from the windward side of fire Fire-fighters should wear proper protective equipment in case of large scale fire. |

6 ACCIDENTAL RELEASE MEASURES

| | |
|---------------------------|---|
| Personal Precautions | Wear protective equipments and avoid eye/skin contact and inhalation |
| Environmental Precautions | Avoid disposition to the environment. |
| Methods for Cleaning up | Use cloth, paper, or anything similar to soak up to the solution leaking out of the container. Take up under vacuum using dust collecting filter. |

7 HANDLING AND STORAGE

HANDLING

| | |
|----------------------|--|
| Technical Measures | Wear protective equipments and avoid contact with eyes and skin. Avoid substance contact. After handling, wash hands completely. |
| Precautions | Handle with ventilation and local exhaust system. |
| Safe Handling Advice | Keep the handling area always clean. |

STORAGE

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|---------------------------|--|
| Proper Storage Conditions | Store at -20°C. If it is for a few days, store at 4°C. |
| Packaging Materials | Store in the original package |



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8 EXPOSURE CONTROLS/ PERSONAL PROTECTION ENGINEERING MEASURES

Set up good ventilation and exhaust system in the work area.

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|-------------------|---|
| Control Parameter | |
| Limit Values | Glycerol |
| JSOH OEL | not established |
| ACGIH TLV | 10mg/m ³ |
| OSHA PEL | total dust: 15mg/m ³ TWA respirable fr.: 5mg/m ³ TWA |

PERSONAL PROTECTIVE EQUIPMENT

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|--------------------------|--|
| Respiratory Protection | Wear a dust mask when needed. |
| Hand Protection | Wear chemical safety gloves. |
| Eye Protection | Wear protective eyeglasses or chemical safety goggles. |
| Skin and Body Protection | Wear lab coat when needed. |

9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------|---|
| Physical State | liquid. SYBR [®] Green Realtime PCR Master Mix freezes at less than -20°C. |
| Colour | very pale red |
| Odour | none |
| pH | 6.0-9.0 |
| Flash Point | Not flammable due to aqueous solution, but glycerol whose flash point 160°C may stay behind after volatilization. |
| Explosion limit | Not explosible |
| Density | 1.0-1.2(g/cm ³) |
| Solubility | Soluble in water. |

10 STABILITY AND REACTIVITY

| | |
|-------------------------|---|
| Stability | Stable at below -20°C. |
| Possible Hazardous | Nothing particular |
| Reactions | |
| Conditions to Avoid | High temperature, ignition sources, direct sunlight |
| Material to Avoid | Strong acids, strong alkalines and strong oxidizers |
| Hazardous Decomposition | Not available |
| Product | |

11 TOXICOLOGICAL INFORMATION

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|--|---|
| Acute Toxicity | Not available |
| Local Effects | May cause eye and skin irritation. |
| Toxicological information on the component of this product | |
| | Glycerol |
| Acute toxicity (LD50) | Oral-mouse: 4090mg/kg Oral-rat: 12.6g/kg |



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12 ECOLOGICAL INFORMATION

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|---------------------------|--|
| Mobility | Soluble in water and diffusible into water environment. |
| Persistence/Degradability | Glycerol, enzyme, antibody, and deoxynucleotide are biodegradable. |
| Bioaccumulation | Not available |

13 DISPOSAL CONSIDERATIONS

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|------------------------|---|
| Waste from Residues | Dispose of in accordance with all applicable local and national laws and regulations. |
| Contaminated Packaging | Dispose of in accordance with all applicable local and national laws and regulations. |

14 TRANSPORT INFORMATION

| | |
|---------------------------|--|
| International Regulations | |
| UN Classification Number | Not classified |
| Specific Precautions | Follow all of the laws and regulations in your respective country. To prevent packages from breaking, handle with care. |

15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

16 OTHER INFORMATION

| | |
|--------|---|
| Notice | The information in this SDS, to the best of our knowledge, is accurate and correct. However, TOYOBO makes no warranty and assumes no liability whatsoever in connection with any use of this information. The SDS is subject to revision as new information becomes available. |
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