

KIT COMPONENTS

Product code	Product Name
95061-100 95061-250 95047-01K 95061-05K	AccuStart™ Taq DNA Polymerase

Components

84036 84025 84026 84027	AccuStart Taq DNA Polymerase
84028 84029	10X PCR Buffer
84030 84031	50 mM magnesium chloride

1. PRODUCT AND COMPANY IDENTIFICATION

Product code 84036, 84025, 84026, 84027
Product name AccuStart™ Taq DNA Polymerase

Manufacturer
 QUANTA BIOSCIENCES INC.
 202 PERRY PKWY., SUITE 1
 GAITHERSBURG, MD 20877
 301-956-1670

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

Chemical Name	CAS No.	Weight %
GLYCEROL	56-81-5	40-60%

3. HAZARDS IDENTIFICATION

Emergency Overview

Irritating to eyes. Irritating to skin.

Form
 Liquid

**Principal Routes of Exposure/
 Potential Health Effects**

Eyes May cause eye irritation with susceptible persons.
Skin May cause skin irritation in susceptible persons.
Inhalation No information available
Ingestion No information available

Specific Effects

Carcinogenic effects No information available
Mutagenic effects No information available
Reproductive toxicity No information available
Sensitization No information available

Target Organ Effects

Eyes. Skin.

HMIS

Health 1
 Flammability 1
 Reactivity 0

4. FIRST AID MEASURES

Skin contact Wash off immediately with plenty of soap and water. If irritation develops, get medical attention.
Eye contact Rinse thoroughly with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, get medical attention.
Ingestion Never give anything by mouth to an unconscious person
Inhalation Move to fresh air
Notes to physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical
Special protective equipment for firefighters Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment
Methods for cleaning up Soak up with inert absorbent material

7. HANDLING AND STORAGE

Handling No special handling advice required
Storage Keep in properly labeled containers

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
GLYCEROL	15 mg/m ³ total dust 5 mg/m ³ respirable fraction	-	10 mg/m ³	-

Engineering measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment
Hand protection Protective gloves
Eye protection Safety glasses with side-shields
Skin and body protection Lightweight protective clothing
Hygiene measures Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls Prevent product from entering drains

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form Liquid

Important Health Safety and Environmental Information

Boiling point/range °C 289.7 °F 554
Melting point/range °C 17.8 °F 64.04
Flash point °C 92.78 °F 199
Autoignition temperature °C No data available °F No data available
Oxidizing properties No information available
Water solubility No data available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions
Materials to avoid No information available
Hazardous decomposition products No information available
Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
GLYCEROL	12600 mg/kg (Rat)	10 g/kg (Rabbit)	570 mg/m ³ (Rat)

Principle Routes of Exposure/ Potential Health Effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	No information available
Ingestion	No information available

Specific Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available

Target Organ Effects

Eyes. Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects	No information available
Mobility	No information available
Biodegradation	No information available
Bioaccumulation	No information available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

IATA

Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard Class	No information available
Subsidiary Class	No information available
Packing group	No information available
UN-No	No information available

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	PICCS	ENCS	DSL	NDSL	AICS
GLYCEROL	Listed	Listed	Listed	Listed	-	Listed

U.S. Federal Regulations

SARA 313

Not regulated

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
GLYCEROL	Listed	-	Listed	-	Listed

California Proposition 65

This product contains the following Proposition 65 chemicals:

WHMIS Hazard class:

D2B Toxic materials

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Quanta BioSciences cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

AccuStart is a trademark of Quanta BioSciences, Inc.

1. PRODUCT AND COMPANY IDENTIFICATION

Product code 84028, 84029
Product name 10X PCR Buffer

Manufacturer
 QUANTA BIOSCIENCES INC.
 202 PERRY PKWY., SUITE 1
 GAITHERSBURG, MD 20877
 301-956-1670

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

Chemical Name	CAS No.	Weight %
TRIS HCl	1185-53-1	1 -5%
Water, PCR Grade	7732-18-5	60-99%

3. HAZARDS IDENTIFICATION

<p>Emergency Overview Irritating to eyes. Irritating to skin.</p> <p style="text-align: center;">Form Liquid</p>
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**Principal Routes of Exposure/
 Potential Health Effects**

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	No information available
Ingestion	No information available

Specific Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available

Target Organ Effects

Eyes. Skin.

HMIS

Health	1
Flammability	0
Reactivity	0

4. FIRST AID MEASURES

Skin contact	Wash off immediately with plenty of soap and water. If irritation develops, get medical attention.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists, get medical attention.
Ingestion	Never give anything by mouth to an unconscious person
Inhalation	Move to fresh air
Notes to physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical
Special protective equipment for firefighters Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment
Methods for cleaning up Soak up with inert absorbent material

7. HANDLING AND STORAGE

Handling No special handling advice required
Storage Keep in properly labeled containers

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
TRIS-HCl	-	-	-	-
Water, PCR Grade	-	-	-	-

Engineering measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment
Hand protection Protective gloves
Eye protection Safety glasses with side-shields
Skin and body protection Lightweight protective clothing
Hygiene measures Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls Prevent product from entering drains

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form Liquid

Important Health Safety and Environmental Information

Boiling point/range °C No data available °F No data available
Melting point/range °C No data available °F No data available
Flash point °C No data available °F No data available
Autoignition temperature °C No data available °F No data available
Oxidizing properties No information available
Water solubility No data available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions
Materials to avoid No information available
Hazardous decomposition products No information available
Polymerization Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
TRIS-HCl	No data available	No data available	No data available
Water, PCR Grade	No data available	No data available	No data available

Principle Routes of Exposure/ Potential Health Effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	No information available
Ingestion	No information available

Specific Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available

Target Organ Effects

Eyes. Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects	No information available
Mobility	No information available
Biodegradation	No information available
Bioaccumulation	No information available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

IATA

Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard Class	No information available
Subsidiary Class	No information available
Packing group	No information available
UN-No	No information available

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	PICCS	ENCS	DSL	NDSL	AICS
TRIS-HCl	Listed	Listed	-	Listed	-	Listed
Water, PCR Grade	Listed	Listed	-	Listed	-	Listed

U.S. Federal Regulations

SARA 313

Not regulated

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
TRIS-HCl	-	-	-	-	-
Water, PCR Grade					

California Proposition 65

This product contains the following Proposition 65 chemicals:

WHMIS Hazard class:

D2B Toxic materials

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Quanta BioSciences cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

1. PRODUCT AND COMPANY IDENTIFICATION

Product code 84030, 84031
Product name 50 mM Magnesium Chloride
Manufacturer
 QUANTA BIOSCIENCES INC.
 202 PERRY PKWY., SUITE 1
 GAITHERSBURG, MD 20877
 301-956-1670

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous/Non-hazardous Components

The product contains no substances which at their given concentration, are considered to be hazardous to health.

3. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Form
Liquid

Potential Health Hazards

Eyes	No information available
Skin	No information available
Inhalation	No information available
Ingestion	No information available

Specific Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available

Target Organ Effects

No information available

HMIS

Health	0
Flammability	0
Reactivity	0

4. FIRST AID MEASURES

Skin contact	Wash off immediately with plenty of soap and water. If irritation develops, get medical attention.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If irritation persists, get medical attention.
Ingestion	Never give anything by mouth to an unconscious person
Inhalation	Move to fresh air
Notes to physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment
Methods for cleaning up	Soak up with inert absorbent material

7. HANDLING AND STORAGE

Handling	No special handling advice required
Storage	Keep in properly labeled containers

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Exposure limits

Engineering measures Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment

Hand protection Protective gloves

Eye protection Safety glasses with side-shields

Skin and body protection Lightweight protective clothing

Hygiene measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls Prevent product from entering drains

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form Liquid

Important Health Safety and Environmental Information

Boiling point/range °C No data available °F No data available

Melting point/range °C No data available °F No data available

Flash point °C No data available °F No data available

Autoignition temperature °C No data available °F No data available

Oxidizing properties No information available

Water solubility No data available

10. STABILITY AND REACTIVITY

Stability	Stable
Materials to avoid	No information available
Hazardous decomposition products	No information available
Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Principle Routes of Exposure/ Potential Health Effects

Eyes No information available

Skin No information available

Inhalation No information available

Ingestion No information available

Specific Effects

Carcinogenic effects No information available

Mutagenic effects No information available

Reproductive toxicity No information available

Sensitization No information available

Target Organ Effects

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

No information available

Mobility

No information available

Biodegradation

Inherently biodegradable

Bioaccumulation

No information available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

IATA

Proper shipping name Not classified as dangerous in the meaning of transport regulations

Hazard Class No information available

Subsidiary Class No information available

Packing group No information available

UN-No No information available

15. REGULATORY INFORMATION

International Inventories

U.S. Federal Regulations

SARA 313

Not regulated

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

U.S. State Regulations

None listed

WHMIS Hazard class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. OTHER INFORMATION

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