

AccuStart™ II Mouse Genotyping Kit

Date: 10 April 2012 Version: 1 Replaces: NA Page 1 of 21

Print Date: 19 August 2013

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

KIT COMPONENTS

Product code	Product Name
95135-100 95135-500	AccuStart™ II Mouse Genotyping Kit
Components	
84228	AccuStart II GelTrack PCR SuperMix
95091-002 95091-025	Extracta™ DNA Prep for PCR - Tissue
84156 84158	Extraction Reagent
84157 84159	Stabilization Reagent



Date: 09 April 2012 Version: 1 Replaces:

Print Date: 19 August 2013

Page 2 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier: AccuStart™ II GelTrack™ PCR SuperMix

Product Code(s): Part Number: 84228

1.2 General Use: Laboratory reagent

Product Description

For Research Use Only, Not for Use in Diagnostic Procedures

1.3 Manufacturer/Supplier

QUANTA BIOSCIENCES INC. 202 PERRY PKWY., SUITE 1 GAITHERSBURG, MD 20877 USA

Phone: +1 (301) 956-1670

FAX: +1 (301) 956-1681

Email: technical.support@quantabio.com

www.quantabio.com

1.4 Emergency Telephone:

Quanta BioSciences: +1 (240) 454-8912 (09:00 to 17:00 EST)
Or contact your local distributor for Quanta BioSciences products.

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product has been classified in accordance with Directive 1999/45/EC and does not meet the criteria for classification.

2.2 Label elements

Labelling in accordance with Directive 1999/45/EC is not required.

2.3 Other hazards

None known.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS#	EINECS # / EC #	Chemical Name	Percentage (wt/wt)	Classifications (EU DSD / EU CLP)*	
1185-53-1	214-684-5	2-amino-2- (hydroxymethyl)propane -1,3-diol hydrochloride	0.5 – 1.3	Xi; R36/37/38	
				Eye Irrit. 2 Skin Irrit. 2 STOT SE 3	H319 H315 H335
56-81-5	200-289-5	Glycerol	0.5 – 1.3	Substance with community workplace exposure limits	

See Section 16 for full text of risk phrases and hazard statements.

^{*}DSD = Directive 67/548/EEC – Dangerous Substances Directive

^{*}CLP = Regulation 1272/2008 - Classification, Labelling, and Packaging



Date: 09 April 2012 Version: 1

Replaces: Page 3 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures:

EYES: Immediately flush with contaminated eye(s) with lukewarm, gently flowing water for at least 5

minutes, while holding the eyelids(s) open. Remove any contact lenses and continue rinsing.

Get medical attention if irritation persists after washing.

SKIN: Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. If

irritation develops and persists, get medical attention.

INGESTION: Rinse mouth thoroughly with water. If large amounts have been ingested, give 2 to 8 ounces

of water. Get medical attention.

INHALATION: If symptoms are experienced, remove source of contamination or move victim to fresh air.

Obtain medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

EYES: May cause eye irritation. Exposed individuals may experience eye tearing, redness, and

discomfort.

SKIN: May cause skin irritation.

INGESTION: May be harmful if swallowed in large quantities.

INHALATION: May cause irritation to the respiratory system if liquid is splashed or aerosolized.

4.3 Indication of any immediate medical attention and special treatment needed:

None

SECTION 5 - FIREFIGHTING MEASURES

5.2 Special hazards arising from the

substance or mixture

None

5.3 Advice for firefighters None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective

equipment and emergency

procedures

Wear gloves and chemical eye goggles or glasses with side shields.

6.2 Environmental precautions Do not discard in drains or sewer systems.

6.3 Methods and material for containment

and cleaning up

Use absorbent suitable to the size and location of the spill. Discard absorbent with hazardous waste if applicable with local regulations.

6.4 Reference to other sections Review Sections 2, 3, and 8

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid contact with skin. Wash hands thoroughly after handling. Wear

protective gloves and eye protection. Avoid breathing mist, vapours or

Print Date: 19 August 2013

aerosols. Use only in a well-ventilated area.

7.2 Conditions for safe storage, including Store at -20°C in original container. Keep away from food, drink and



Date: 09 April 2012 Version: 1 Replaces: Page 4 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

any incompatibilities animal feeding stuffs.

7.3 Specific end use(s) Not available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

8.1.1 Occupational exposure limits:

<u>Chemical</u>	<u>Limit valu</u>	<u>e – 8 hours</u>	<u>Limit value – Short term</u>	
	ppm	mg/m ³	ppm	mg/m ³
Glycerol:		-		_
Austria	-	-	=	-
Belgium	-	10	-	-
Denmark	-	-	-	-
European Union	-	-	=	-
France	-	10	-	-
Germany	=	10*	=	100*
Hungary	-	-	=	-
Italy	=	=	=	-
Poland	-	10	=	-
Spain	=	10	=	-
Sweden	=	=	=	-
The Netherlands	=	=	=	-
United Kingdom	-	10	-	-

^{*} inhalable aerosol

- 8.1.2 Currently recommended monitoring procedures: Not determined
- 8.1.3 Exposure guidelines for air contaminants, if any:
 Not determined
- 8.1.4 DNELs and PNECs for exposure scenarios: Not determined
- 8.1.5 Control banding for risk management: Not determined

8.2 Exposure controls:

Engineering controls: Use in well-ventilated area with mechanical exhaust when

operations cause vapour or aerosol formation.

Respiratory protection: No specific recommendation made, but respiratory protection

must be used if the general level exceeds the recommended

occupational exposure limits (OEL).

Skin & body protection:

Use protective gloves made of: butyl rubber. The most suitable glove must be chosen in consultation with the gloves suppler,

who can inform about the breakthrough time of the glove

material. Change out of clothes that become wet.

Eye protection: Wear approved chemical safety goggles or safety glasses with

side shields where exposure to vapour or aerosol or contact with

Print Date: 19 August 2013



Date: 09 April 2012 Version: 1 Replaces: Page 5 of 21

Print Date: 19 August 2013

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

eyes is reasonably probable. Provide eye wash station.

Thermal hazards: None Environmental exposure controls: None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance: Green liquid

Odour: None

Odour threshold: Not applicable

pH: 8.7

Melting/freezing point

Initial boiling point & boiling range:

Flash point:

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive

Not measured

Not applicable

Not applicable

limits:

Vapour pressure: Not measured Vapour density: Not measured Not measured Relative density: Solubility(ies) Complete in water Partition coefficient: Not measured Auto-ignition temperature: Not applicable Decomposition temperature: Not applicable Not measured Viscosity:

Explosive properties: None
Oxidising properties: None
Other: None

9.2 Other information:

None

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity: Stable10.2 Chemicals stability: Stable

10.3 Possibility of hazardous reactions: Will not occur

10.4 Conditions to avoid: Static discharges, hot sources, ignition sources



Date: 09 April 2012 Version: 1 Replaces: Page 6 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

10.5 Incompatible materials: Avoid accidental contact with strong oxidizers (e.g., nitric acid)

10.6 Hazardous decomposition products: In case of fire, formation of CO_x

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture:

The acute effects of this product have not been tested. Data on individual components are tabulated below:

Tris(hydroxymethyl) 5900 mg/kg (rat) -

aminomethane

Glycerol 12600 mg/kg (rat) >1000 mg/kg (rabbit) >570 mg/m³ (rat)

<u>Category</u> <u>Available data</u>

Acute toxicity: May be harmful if swallowed in large quantities. May cause irritation to

the respiratory system if liquid is splashed or aerosolized.

Skin/eye irritation: May cause skin irritation. May cause eye irritation. Exposed

individuals may experience eye tearing, redness, and discomfort.

Corrosivity: None

Respiratory or skin sensitisation: Not expected

Germ cell mutagenicity: Insufficient information for classification.

Carcinogenicity: Not expected. None of the components at reportable levels have been

designated as potential carcinogens by IARC (Group 1, 2A or 2B) or

Print Date: 19 August 2013

other foreign national agencies.

Reproductive toxicity: Not expected if occupational exposure levels are observed.

STOT-SE: May cause respiratory irritation.

STOT-RE: Not expected if occupational exposure levels are observed.

Aspiration hazard: Not expected

ROUTE OF ENTRY: Skin and/or eye contact. Less likely routes are inhalation or ingestion.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity: Does not meet criteria for acute ecotoxicity based on available

information.

12.2 Persistence and degradability: Not determined. Insufficient information
 12.3 Bioaccumulative potential: Not determined. Insufficient information
 12.4 Mobility in soil: Not determined. Insufficient information

12.5 Results of PBT and vPvB Does not contain any ingredients that are assessed as PBT or vPvB.

assessment:

12.6 Other adverse effects: None known



Date: 09 April 2012 Version: 1 Replaces: Page 7 of 21

Print Date: 19 August 2013

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Discard contents in compliance with local regulations.

SECTION 14 - TRANSPORT INFORMATION

ARD/RID Not regulated

Proper Shipping Name

Class

Classification Code
UN Number
Packing Group
Environmental hazard

IMDG Not regulated

Proper Shipping Name

Class EmS

UN Number Packing Group Flashpoint

ICAO/IATA Not regulated

Proper Shipping Name Class

Packing Instruction UN Number Packing Group

Special precautions for user: None known

SECTION 15 - REGULATORY INFORMATION

15.1 Safety health and environmental regulations:

Consult the most current list of restrictions for details. The following chemicals are indicated in Annex XII of Regulation 1907/2007.

None

15.2 Chemical Safety Assessment:

Has not been done.

SECTION 16 - OTHER INFORMATION

SDS Status: Original Replaces version: NA

Changes: updated format

List of R-phrases in Section 3

R36/37/38 Irritating to eyes, respiratory system and skin.



Date: 09 April 2012 Version: 1 Replaces: Page 8 of 21

Print Date: 19 August 2013

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

List of Hazard Statements in Section 3

H315 Causes skin irritation

H319 Causes serious eye irritation H335 May cause respiratory irritation

Methods used for evaluation: For CLP, other methods as described in each section of Parts 3 and 4 of Annex I

Classification in accordance with Regulation (EU) 1272/2008 in advance of June 1, 2015 required date:

Does not meet criteria for classification.

KEY: DNEL = Derived No-Effect Level; IARC = International Agency for Research of Cancer; WEL = Workplace Exposure Limits; OEL = Occupational Exposure Limits; PBT = Persistent, Bioaccumulative, Toxic; PNEC = Predicted No-Effect Concentration; TWA = Time Weighted Average (8 hours); STEL = Short Term Exposure Limit (15 minutes); ppm = parts per million; vPvB = very Persistent, very Bioaccumulative

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 and GelTrack are trademarks of Quanta BioSciences, Inc.



Date: 10 April 2012 Version: 1

Replaces: Page 9 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier: Extraction Reagent

Product Code(s): 84156; 84158

1.3 General Use: Laboratory reagent

Product Description

For Research Use Only, Not for Use in Diagnostic Procedures

1.3 Manufacturer/Supplier

QUANTA BIOSCIENCES INC. 202 PERRY PKWY., SUITE 1 GAITHERSBURG, MD 20877

USA

Phone: +1 (301) 956-1670 FAX: +1 (301) 956-1681

Email: technical.support@quantabio.com

www.quantabio.com

1.4 Emergency Telephone:

Quanta BioSciences: +1 (301) 947-2913 (09:00 to 17:00 EST)
Or contact your local distributor for Quanta BioSciences products.

SECTION 2 - HAZARDS IDENTIFICATION

2.4 Classification of the substance or mixture

This product has been classified in accordance with Directive 1999/45/EC and does not meet the criteria for classification.

2.5 Label elements

Labelling in accordance with Directive 1999/45/EC is not required.

2.6 Other hazards None known.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS#	EINECS # / EC #	Chemical Name	Percentage (wt/wt)	Classifications (EU DSD / EU CLP)*	
NA	NA	Proprietary	<0.11	Xi; R36/37/38	
				Eye Irrit. 2 Skin Irrit. 2 STOT SE 3	H319 H315 H335
7732-18-5	200-289-5	water	>99.89	none	

See Section 16 for full text of risk phrases and hazard statements.

^{*}DSD = Directive 67/548/EEC – Dangerous Substances Directive

^{*}CLP = Regulation 1272/2008 – Classification, Labelling, and Packaging



Date: 10 April 2012 Version: 1 Replaces: Page 10 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 4 - FIRST AID MEASURES

4.4 Description of first aid measures:

EYES: Immediately flush with contaminated eye(s) with lukewarm, gently flowing water for at least 5

minutes, while holding the eyelids(s) open. Remove any contact lenses and continue rinsing.

Get medical attention if irritation persists after washing.

SKIN: Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. If

irritation develops and persists, get medical attention.

INGESTION: Rinse mouth thoroughly with water. If large amounts have been ingested, give 2 to 8 ounces

of water. Get medical attention.

INHALATION: If symptoms are experienced, remove source of contamination or move victim to fresh air.

Obtain medical advice.

4.5 Most important symptoms and effects, both acute and delayed:

EYES: May cause eye irritation. Exposed individuals may experience eye tearing, redness, and

discomfort.

SKIN: May cause skin irritation.

INGESTION: May be harmful if swallowed in large quantities.

INHALATION: May cause irritation to the respiratory system if liquid is splashed or aerosolized.

4.6 Indication of any immediate medical attention and special treatment needed:

None

SECTION 5 - FIREFIGHTING MEASURES

5.2 Special hazards arising from the

substance or mixture

None

5.3 Advice for firefighters None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective

equipment and emergency

procedures

Wear gloves and chemical eye goggles or glasses with side shields.

6.2 Environmental precautions Do not discard in drains or sewer systems.

3.3 Methods and material for containment

and cleaning up

Use absorbent suitable to the size and location of the spill. Discard absorbent with hazardous waste if applicable with local regulations.

6.4 Reference to other sections Review Sections 2, 3, and 8

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid contact with skin. Wash hands thoroughly after handling. Wear

protective gloves and eye protection. Avoid breathing mist, vapours or

aerosols. Use only in a well-ventilated area.

7.2 Conditions for safe storage, including Store at ambient temperatures.



Date: 10 April 2012 Version: 1 Replaces:

Replaces: Page 11 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

any incompatibilities

7.3 Specific end use(s) Not available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

8.1.2 Occupational exposure limits:

<u>Chemical</u>	<u>Limit valu</u>	<u>e – 8 hours</u>	<u>Limit value – Short term</u>	
	ppm	mg/m ³	ppm	mg/m ³
Glycerol:		-		_
Austria	-	-	=	-
Belgium	-	10	-	-
Denmark	-	-	-	-
European Union	-	-	=	-
France	-	10	-	-
Germany	=	10*	=	100*
Hungary	-	-	=	-
Italy	=	=	=	-
Poland	-	10	=	-
Spain	=	10	=	-
Sweden	=	=	=	-
The Netherlands	=	=	=	-
United Kingdom	-	10	-	-

^{*} inhalable aerosol

- 8.1.2 Currently recommended monitoring procedures: Not determined
- 8.1.3 Exposure guidelines for air contaminants, if any:
 Not determined
- 8.1.4 DNELs and PNECs for exposure scenarios: Not determined
- 8.1.5 Control banding for risk management: Not determined

8.2 Exposure controls:

Engineering controls: Use in well-ventilated area with mechanical exhaust when

operations cause vapour or aerosol formation.

Respiratory protection: No specific recommendation made, but respiratory protection

must be used if the general level exceeds the recommended

occupational exposure limits (OEL).

Skin & body protection:

Use protective gloves made of: butyl rubber. The most suitable

glove must be chosen in consultation with the gloves suppler, who can inform about the breakthrough time of the glove

material. Change out of clothes that become wet.

Eye protection: Wear approved chemical safety goggles or safety glasses with

side shields where exposure to vapour or aerosol or contact with



Date: 10 April 2012 Version: 1 Replaces: Page 12 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

eyes is reasonably probable. Provide eye wash station.

Thermal hazards: None Environmental exposure controls: None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance: Clear liquid
Odour: None

Odour threshold: Not applicable

pH: 8.5

Melting/freezing point

Initial boiling point & boiling range:

Flash point:

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive

Not measured

Not applicable

Not determined

limits:

Vapour pressure: Not measured Vapour density: Not measured Relative density: Not measured Solubility(ies) Complete in water Partition coefficient: Not measured Auto-ignition temperature: Not applicable Decomposition temperature: Not applicable Not determined Viscosity:

Explosive properties:

Oxidising properties:

None
Other:

None

9.2 Other information:

None

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity:Stable10.2 Chemicals stability:Stable

10.3 Possibility of hazardous reactions: Will not occur

10.4 Conditions to avoid: Static discharges, hot sources, ignition sources



Date: 10 April 2012 Version: 1 Replaces: Page 13 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

10.5 Incompatible materials: Avoid accidental contact with strong oxidizers (e.g., nitric acid)

10.6 Hazardous decomposition products: In case of fire, formation of CO_x

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture:

The acute effects of this product have not been tested. Data on individual components are tabulated below:

Tris(hydroxymethyl) 5900 mg/kg (rat) -

aminomethane

<u>Category</u> <u>Available data</u>

Acute toxicity: May be harmful if swallowed in large quantities. May cause irritation to

the respiratory system if liquid is splashed or aerosolized.

Skin/eye irritation: May cause skin irritation. May cause eye irritation. Exposed

individuals may experience eye tearing, redness, and discomfort.

Corrosivity: None

Respiratory or skin sensitisation: Not expected

Germ cell mutagenicity: Not expected. Insufficient information for classification.

Carcinogenicity: Not expected. None of the components at reportable levels have been

designated as potential carcinogens by IARC (Group 1, 2A or 2B) or

other foreign national agencies.

Reproductive toxicity: Not expected if occupational exposure levels are observed.

STOT-SE: May cause respiratory irritation.

STOT-RE: Not expected if occupational exposure levels are observed.

Aspiration hazard: Not expected

ROUTE OF ENTRY: Skin and/or eye contact. Less likely routes are inhalation or ingestion.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity: Does not meet criteria for acute ecotoxicity based on available

information.

12.3 Persistence and degradability: Not determined. Insufficient information
12.3 Bioaccumulative potential: Not determined. Insufficient information
12.4 Mobility in soil: Not determined. Insufficient information

12.5 Results of PBT and vPvB Does not contain any ingredients that are assessed as PBT or vPvB.

assessment:

12.6 Other adverse effects: None known



Date: 10 April 2012 Version: 1 Replaces: Page 14 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Discard contents in compliance with local regulations.

SECTION 14 - TRANSPORT INFORMATION

ARD/RID Not regulated

Proper Shipping Name

Class

Classification Code UN Number Packing Group Environmental hazard

IMDG Not regulated

Proper Shipping Name

Class EmS

UN Number Packing Group Flashpoint

ICAO/IATA Not regulated

Proper Shipping Name

Class

Packing Instruction UN Number Packing Group

Special precautions for user: None known

SECTION 15 - REGULATORY INFORMATION

15.1 Safety health and environmental regulations:

Consult the most current list of restrictions for details. The following chemicals are indicated in Annex XII of Regulation 1907/2007.

None

15.2 Chemical Safety Assessment:

Has not been done.

SECTION 16 - OTHER INFORMATION

SDS Status: Version 1.1 Replaces version: Rev. 11-FEB-2008

Changes: updated format

List of R-phrases in Section 3

R36/37/38 Irritating to eyes, respiratory system and skin.



Date: 10 April 2012 Version: 1 Replaces: Page 15 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

List of Hazard Statements in Section 3

H315 Causes skin irritation

H319 Causes serious eye irritation H335 May cause respiratory irritation

Methods used for evaluation: For CLP, other methods as described in each section of Parts 3 and 4 of Annex I

Classification in accordance with Regulation (EU) 1272/2008 in advance of June 1, 2015 required date:

Does not meet criteria for classification.

KEY: DNEL = Derived No-Effect Level; IARC = International Agency for Research of Cancer; WEL = Workplace Exposure Limits; OEL = Occupational Exposure Limits; PBT = Persistent, Bioaccumulative, Toxic; PNEC = Predicted No-Effect Concentration; TWA = Time Weighted Average (8 hours); STEL = Short Term Exposure Limit (15 minutes); ppm = parts per million; vPvB = very Persistent, very Bioaccumulative

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.



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 16 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier: Nuclease-Free Water

Product Code(s): 84007

1.2 General Use: Laboratory use

Product Description

For Research Use Only, Not for Use in Diagnostic Procedures

1.3 Manufacturer/Supplier

QUANTA BIOSCIENCES INC. 202 PERRY PKWY., SUITE 1 GAITHERSBURG, MD 20877

USA

Phone: +1 (301) 956-1670 FAX: +1 (301) 956-1681

Email: technical.support@quantabio.com

www.quantabio.com

1.4 Emergency Telephone:

Quanta BioSciences: +1 (301) 947-2913 (09:00 to 17:00 EST)
Or contact your local distributor for Quanta BioSciences products.

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product has been classified in accordance with Directive 1999/45/EC and does not meet the criteria for classification.

2.2 Label elements

Labelling in accordance with Directive 1999/45/EC is not required.

2.3 Other hazards

None known.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

No hazardous components.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid* measures:

EYES: Flush eyes with water as a precaution.

SKIN: Wash off with soap and plenty of water.

INGESTION: Never give anything by mouth to an unconscious person. Rinse mouth with water. INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration..

*These are basic first aid measures that can used as a precaution if deemed appropriate.

4.2 Most important symptoms and effects, both acute and delayed:

EYES: None expected



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 17 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SKIN: None expected INGESTION: None expected INHALATION: None expected

4.3 Indication of any immediate medical attention and special treatment needed:

None

SECTION 5 - FIREFIGHTING MEASURES

5.1 Extinguishing media Use media suitable for surrounding fire.

5.2 Special hazards arising from the

substance or mixture

None

5.3 Advice for firefighters None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective

equipment and emergency

procedures

Wear gloves and chemical safety glasses with side shields.

6.2 Environmental precautions No special environmental precautions required.

6.3 Methods and material for containment

and cleaning up

Use absorbent suitable to the size and location of the spill. Discard absorbent with hazardous waste if applicable with local regulations.

6.4 Reference to other sections Review Sections 2, 3, and 8

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling No data available.

7.2 Conditions for safe storage, including

any incompatibilities

Store at ambient temperatures.

7.3 Specific end use(s) Not available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

8.1.3 Occupational exposure limits:

<u>Chemical</u> <u>Limit value – 8 hours</u> <u>Limit value – Short term</u> ppm mg/m³ <u>ppm mg/m³</u>

None

8.1.2 Currently recommended monitoring procedures:

Not determined

8.1.3 Exposure guidelines for air contaminants, if any:



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 18 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

Not determined

8.1.4 DNELs and PNECs for exposure scenarios:

Not determined

8.1.5 Control banding for risk management:

Not determined

8.2 Exposure controls:

Engineering controls: Use in well-ventilated area with mechanical exhaust when

operations cause vapour or aerosol formation.

Respiratory protection: No specific recommendation made, but respiratory protection

must be used if the general level exceeds the recommended

occupational exposure limits (OEL).

Skin & body protection: Use protective gloves made of: butyl rubber. The most suitable

glove must be chosen in consultation with the gloves suppler, who can inform about the breakthrough time of the glove

material. Change out of clothes that become wet.

Eye protection: Wear approved chemical safety glasses with side shields where

exposure to vapour or aerosol or contact with eyes is reasonably

probable. Provide eye wash station.

Thermal hazards: None Environmental exposure controls: None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance: Clear liquid
Odour: None

Odour threshold: Not applicable pH: 6.0 – 8.0 at 25 °C

Melting/freezing point 0.0 °C
Initial boiling point & boiling range: 100 °C

Flash point: Does not flash
Evaporation rate: Not measured
Flammability (solid, gas): Not applicable
Upper/lower flammability or explosive limits:

Vapour pressure: Not measured Vapour density: Not measured

Relative density: 1.000 g/ml at 3.98 °C
Solubility(ies) Complete in water
Partition coefficient: Not measured



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 19 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Not applicable

Not applicable

Not measured

Explosive properties:

No data available

Other:

No data available

9.2 Other information:

None

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity: No data available
10.2 Chemicals stability: No data available
10.3 Possibility of hazardous reactions: No data available
10.4 Conditions to avoid: No data available
10.5 Incompatible materials: No data available
10.6 Hazardous decomposition products: No data available

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture:

The acute effects of this product have not been tested. Data on individual components are tabulated below:

Chemical Name Oral LD_{50} Dermal LD_{50} Inhalation LC_{50}

Water rat - > 90,000 mg/kg

CategoryAvailable dataAcute toxicity:None expected.Skin/eye irritation:None expected

Corrosivity: None

Respiratory or skin sensitisation: Not expected

Germ cell mutagenicity: Insufficient information for classification.

Carcinogenicity: None of the components at reportable levels have been designated as

potential carcinogens by IARC (Group 1, 2A or 2B) or other foreign

national agencies.

Reproductive toxicity:

STOT-SE:

No data available

STOT-RE:

No data available

No data available

Aspiration hazard:

No data available



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 20 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

ROUTE OF ENTRY: Skin and/or eye contact. Less likely routes are inhalation or ingestion.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity: Does not meet criteria for acute ecotoxicity based on available

information.

12.4 Persistence and degradability: Not applicable
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available

12.5 Results of PBT and vPvB

assessment:

Does not contain any ingredients that are assessed as PBT or vPvB.

12.6 Other adverse effects: None known

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Discard contents in compliance with local regulations.

SECTION 14 - TRANSPORT INFORMATION

ARD/RID Not regulated

Proper Shipping Name

Class

Classification Code
UN Number
Packing Group

Environmental hazard

IMDG Not regulated

Proper Shipping Name

Class EmS UN Number Packing Group Flashpoint

ICAO/IATA Not regulated

Proper Shipping Name

Class

Packing Instruction UN Number Packing Group

Special precautions for user: None known



Date: 03 JAN 2011 Version: 1.1

Replaces: Rev. 28-JUN-2007

Page 21 of 21

SAFETY DATA SHEET

According to EC Directive 1907/2006/EC

SECTION 15 - REGULATORY INFORMATION

15.1 Safety health and environmental regulations:

Consult the most current list of restrictions for details. The following chemicals are indicated in Annex XII of Regulation 1907/2007.

None

15.2 Chemical Safety Assessment: No data available

SECTION 16 - OTHER INFORMATION

SDS Status: Version 1.1 Replaces version: Rev. 28-JUN-2007 Changes: updated format

List of R-phrases in Section 3

None

List of Hazard Statements in Section 3

None

Methods used for evaluation: For CLP, other methods as described in each section of Parts 3 and 4 of Annex I

Classification in accordance with Regulation (EU) 1272/2008 in advance of June 1, 2015 required date:

Does not meet criteria for classification.

KEY: DNEL = Derived No-Effect Level; IARC = International Agency for Research of Cancer; WEL = Workplace Exposure Limits; OEL = Occupational Exposure Limits; PBT = Persistent, Bioaccumulative, Toxic; PNEC = Predicted No-Effect Concentration; TWA = Time Weighted Average (8 hours); STEL = Short Term Exposure Limit (15 minutes); ppm = parts per million; vPvB = very Persistent, very Bioaccumulative

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.