

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

PRODUCT NAME	<i>BIOKITS Casein Assay Kit</i>
PRODUCT NUMBERS	902062W
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	A matched set of components of : 96 well Casein Plate 1 x vial Casein Biotin 1 x vial Milk protein standard 1 x vial Casein control 1 x vial Avidin Peroxidase Conjugate 1 x vial Stop Solution (25% phosphoric acid) 1 vial TMB Solution 1 x vial Wash Solution 1 x vial Diluent concentrate 10
CAS No	None assigned for the product
EC No	None assigned for the product
Use	For the qualitative and quantitative determination of casein in food.
HAZARDOUS INGREDIENT(S)	Listed below for each component

Component Part: Casein Plate

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME Antibody Sensitised Microwell Plate

PRODUCT NUMBERS 502054B
Address/ Phone No Tepnel *BioSystems* Ltd
1 Newtech Square
Deeside Industrial Park
Flintshire
UNITED KINGDOM, CH5 2NT
Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS 96 microwell polystyrene plate

CAS No None assigned for the component
EC No None assigned for the component
Use For the qualitative and quantitative determination of casein in food
For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
None			

3. HAZARDS IDENTIFICATION

Risks None

Special Risk Conditions None

4. FIRST-AID MEASURES

Inhalation Unlikely to be contaminated by these routes
Skin Contact
Eye contact
Ingestion
Further Medical treatment

5. FIRE FIGHTING MEASURES

Oxidising agent In case of fire do not breathe fumes
Extinguishing Media In case of fire keep away from combustible materials, decomposes to form toxic gas
Fire fighting protective equipment Use water spray, CO₂ dry chemical powder or appropriate foam. Wear self contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Small spillages Not Applicable
Spill treatment method

7. HANDLING AND STORAGE

HANDLING No precautions necessary
STORAGE Store at 2-8 °C

Storage Life Total storage life at recommended conditions 18 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators Not applicable
Eye protection Not applicable
Gloves Latex or other light weight gloves
Other Lab coat

Component Part: Casein Plate

Occupational exposure limits None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties.
Form	Solid
Colour	Colourless
Odour	Odourless
pH (Value)	Not applicable
Boiling point (°C)	Not Applicable
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	Not Applicable

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 18 months
Hazardous reactions	Keep away from combustible materials
Hazardous Decomposition Products	On combustion decomposes to form toxic gas

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure.
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use.
Eye contact	Unlikely route of exposure.
Ingestion	Unlikely route of exposure.
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use.

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

R and S Phrases	Not classified as Dangerous for Supply/Use In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.
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16. OTHER INFORMATION

This section of data sheet relating to Casein Plate is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

Component Part:

Casein Biotin

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Casein Biotin
PRODUCT NUMBERS	502320G
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	6.0mL casein biotin conjugated extract in phospho buffered saline containing thiomersal (<0.01%) and ANS (<0.01%)		
CAS No	None assigned for the component		
EC No	None assigned for the component		
Use	For the qualitative and quantitative determination of casein in food.		
HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Di-Sodium hydrogen orthophosphate	7558-79-4		
Sodium di-Hydrogen orthophosphate	13472-35-0		
Sodium Chloride	7647-14-5		
Thiomersal	54-64-8	T	
Tween 80	9005-65-6		
ANS	28836-03-05	Xi	36/37/38
Gelatin	9000-70-8		

3. HAZARDS IDENTIFICATION

Risks	None identified
Special Risk Conditions	None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, CO ₂ , dry chemical powder or appropriate foam.
Fire fighting protective equipment	

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8 °C
Storage Life	Total storage life at recommended conditions 18 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties. Similar chemical properties as water
Form	Liquid
Colour	Amber
Odour	Odourless
pH (Value)	7.2
Boiling point (°C)	Not Applicable
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.00

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 18 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12 ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

R and S Phrases

Not classified as Dangerous for Supply/Use
In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the Casein Biotin is prepared in accordance with Directive 91/155/EEC (93/112/EC).

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Component Part:

Casein Control

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Casein control
PRODUCT NUMBERS	502351U
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	1.0mL of extracted milk powder in a tris based buffer containing thiomersal (<0.01%).
CAS No	None assigned for the component
EC No	None assigned for the component
Use	For the qualitative and quantitative determination of casein in food. For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Sodium Chloride	7647-14-5		
Gelatin	9000-70-8		
Tris HCL	77-86-1		
Thiomersal	54-64-8	T	

3. HAZARDS IDENTIFICATION

Risks	None identified
Special Risk Conditions	None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Skin Contact	
Eye contact	
Ingestion	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Further Medical treatment	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, CO ₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment	

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8 °C
Storage Life	Total storage life at recommended conditions 12 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Component Part:**Casein Control**

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties. The product's characteristics are very similar to water
Form	Liquid
Colour	Colourless
Odour	Odourless
pH (Value)	8.2
Boiling point (°C)	100
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.0

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 12 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

R and S Phrases	Not classified as Dangerous for Supply/Use In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.
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16. OTHER INFORMATION

This part of the data sheet relating to the casein control is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

Component Part: Milk protein standard

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Milk protein standard
PRODUCT NUMBERS	502317U
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	4.5mL of purified casein in phospho buffered saline containing thiomersal (<0.01%).
CAS No	None assigned for the component
EC No	None assigned for the component
Use	For the qualitative and quantitative determination of casein in food. For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Di-Sodium hydrogen orthophosphate	7558-79-4		
Sodium di-Hydrogen orthophosphate	13472-35-0		
Sodium Chloride	7647-14-5		
Thiomersal	54-64-8	T	
Tween 80	9005-65-6		
Gelatin	9000-70-8		
Polyoxyethylene	9002-92-0	Xn	22/38/41
Igepal CA 630	9036-19-5		22/41

3. HAZARDS IDENTIFICATION

Risks	None identified
Special Risk Conditions	None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, CO ₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment	

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
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Component Part: Milk protein standard

STORAGE Store at 2-8°C
Storage Life Total storage life at recommended conditions 12 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators Not applicable
Eye protection Splash proof goggles or safety glasses
Gloves Latex or other light weight gloves
Other Lab coat
Occupational exposure limits None set

9. PHYSICAL AND CHEMICAL PROPERTIES

There are no unusual properties. The product's characteristics are very similar to water
Form Liquid
Colour Colourless
Odour Odourless
pH (Value) 7.2
Boiling point (°C) 100
Flash Point (°C) Not Applicable
Flammable limits Not Applicable
Auto Ignition Temperature (°C) Not Applicable
Specific gravity 1.0

10. STABILITY & REACTIVITY

Stable Under advised storage conditions 12 months
Hazardous reactions None known
Hazardous Decomposition Products Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation Unlikely route of exposure
Skin contact Unlikely to cause harmful effects under recommended conditions of handling and use.
The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact Unlikely to cause harmful effects under recommended conditions of handling and use.
May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure Unlikely to cause harmful effects under recommended conditions of handling and use

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

R and S Phrases Not classified as Dangerous for Supply/Use
In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the Milk protein standard is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

Component Part:

Avidin Peroxidase Conjugate

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Avidin Peroxidase Conjugate
PRODUCT NUMBERS	502087K
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS 6.0mL of Avidin Peroxidase Conjugate(<0.025%) in phospho buffered saline containing ANS (0.05%) and Thiomersal (<0.01%)

CAS No None assigned for the component
EC No None assigned for the component
Use For the qualitative and quantitative determination of casein in food.
For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Di-Sodium hydrogen orthophosphate	7558-79-4		
Sodium di-Hydrogen orthophosphate	13472-35-0		
Sodium Chloride	7647-14-5		
Thiomersal	54-64-8	T	
Tween 80	9005-65-6		
ANS	28836-03-05	Xi	36/37/38

3. HAZARDS IDENTIFICATION

Risks None identified

Special Risk Conditions None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, CO₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8°C

Component Part:**Avidin Peroxidase Conjugate**

Storage Life Total storage life at recommended conditions 18 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties. The product's characteristics are very similar to water
Form	Liquid
Colour	Amber
Odour	None
pH (Value)	7.2
Boiling point (°C)	100
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	Not Applicable

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 18 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation..
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

R and S Phrases

Not classified as Dangerous for Supply/Use
In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the Avidin Peroxidase Conjugate is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Diluent solution 10
PRODUCT NUMBERS	502310K
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	50mL of phospho buffered saline containing Tween 80 (1.0%),Thiomersal (<0.02%) and gelatin (2.0%)
CAS No	None assigned for the component
EC No	None assigned for the component
Use	For the qualitative and quantitative determination of casein in food. For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Di-Sodium hydrogen orthophosphate	7558-79-4		
Sodium di-Hydrogen orthophosphate	13472-35-0		
Sodium Chloride	7647-14-5		
Thiomersal	54-64-8	T	
Tween 80	9005-65-6		
Gelatin	9000-70-8		

3. HAZARDS IDENTIFICATION

Risks	None identified
Special Risk Conditions	None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media Fire fighting protective equipment	Use water spray, CO ₂ dry chemical powder or appropriate foam.
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6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8°C

Storage Life

Total storage life at recommended conditions 24 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties. The product's characteristics are very similar to water
Form	Liquid
Colour	Colourless
Odour	None
pH (Value)	7.0
Boiling point (°C)	100
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.0

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 24 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

Not classified as Dangerous for Supply/Use

16. OTHER INFORMATION

This part of the data sheet relating to the Diluent Concentrate 10 is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

Component Part:

Stop Solution (25% phosphoric acid)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME Stop Solution (25% phosphoric acid)

PRODUCT NUMBERS 502205G
Address/ Phone No Tepnel BioSystems Ltd
1 Newtech Square
Deeside Industrial Park
Flintshire
UNITED KINGDOM, CH5 2NT
Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS 6.9mL of Orthophosphoric Acid (<25%)
CAS No None assigned for the component
EC No None assigned for the component
Use For the qualitative determination of casein in food /feedstuff by immunoassay.
For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Orthophosphoric acid	007664-38-2	Xi	R36/R38

3. HAZARDS IDENTIFICATION

Risks R36/38 – Irritating to eyes and skin
Special Risk Conditions None Identified

4. FIRST-AID MEASURES

Inhalation Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact Remove any contact lenses. Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, CO₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment

6. ACCIDENTAL RELEASE MEASURES

Small spillages Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method Not applicable.

7. HANDLING AND STORAGE

HANDLING Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE Store at 2-8 °C
Storage Life Total storage life at recommended conditions 36 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Component Part:**Stop Solution (25% phosphoric acid)**

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	(100% solution) 80/1107/EEC (1996) STEL: 2ppm TWA: 1ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

	This is an organic acid.
Form	Liquid
Colour	Colourless
Odour	None
pH (Value)	2
Boiling point (°C)	100
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.2

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 36 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12 ECOLOGICAL INFORMATION

No information available. The products of degradation are less toxic than the material itself.

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport in current form

Component Part:

Stop Solution (25% phosphoric acid)

15. REGULATORY INFORMATION

R and S Phrases

Not classified as Dangerous for Supply/Use in current quantities
In accordance with EU directive 88/379/EEC, it has been determined
that the chemical constituents of this product are classified as having
no significant hazard, due to the physical/chemical nature and/or
concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the Stop Solution (25% phosphoric acid) is prepared in accordance with
Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief
accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is
the responsibility of the users to determine the applicability, of such information or the suitability of the products for
their own particular purpose.

Component Part:

TMB Substrate

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	TMB Substrate
PRODUCT NUMBERS	502266K
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS	11.0mL of TMB substrate as supplied by Dako Ltd.
CAS No	None assigned for the component
EC No	None assigned for the component
Use	For the qualitative and quantitative determination of casein in food. For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
<20% 1-methyl-2-Pyrrolidone (M2P)	872-50-4	Xi	R36/38
< 20% Propylene Glycol	57-55-6	Xi	R36/38

3. HAZARDS IDENTIFICATION

Risks	Possible risk of harm to unborn child. May be harmful by inhalation, in contact with skin and if swallowed. Material may be irritating to eyes and skin
Special Risk Conditions	None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, CO ₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment	

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Not applicable

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8°C

Component Part:

TMB Substrate

Storage Life As recommended by supplier.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators	Not applicable
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits (M2P)	100ppm (400mg/m ³) (EC 8h TWA)

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties.
Form	Liquid
Colour	Colourless
Odour	None
pH (Value)	7.0
Boiling point (°C)	Not Applicable
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.0

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions as per supplier expiry date
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12 ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

	Not classified as Dangerous for Supply/Use
R and S Phrases	In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the TMB substrate is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.

Component Part:

Wash Solution Concentrate

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY UNDERTAKING

COMPONENT NAME	Wash Solution Concentrate
PRODUCT NUMBERS	502259G
Address/ Phone No	Tepnel <i>BioSystems</i> Ltd 1 Newtech Square Deeside Industrial Park Flintshire UNITED KINGDOM, CH5 2NT Telephone +44 (0) 1244 280202

2. INFORMATION ON COMPONENTS

CONTENTS 100mL of 10x Tris saline wash solution

CAS No None assigned for the component
EC No None assigned for the component
Use For the qualitative and quantitative determination of casein in food.
For professional use only.

HAZARDOUS INGREDIENT(S)	CAS No	Symbol	R Phrases
Tris (hydroxymethyl) methylamine	7365-44-8		
Tris hydroxymethyl amino methane HCl	1185-53-1		
Sodium Chloride	7647-14-5		
n-methylisothiazolone HCl	11-085-905	Xn	R20/22/34/43

3. HAZARDS IDENTIFICATION

Risks (MIT) Harmful if swallowed or inhaled

Special Risk Conditions None Identified

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air and keep at rest. Unlikely route of exposure
Skin Contact	Remove contaminated clothing. Wash skin immediately with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	If swallowed seek medical advice immediately. Wash out mouth with water and give 200-300mL of water to drink
Further Medical treatment	Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, CO₂ dry chemical powder or appropriate foam.
Fire fighting protective equipment

6. ACCIDENTAL RELEASE MEASURES

Small spillages	Ensure suitable personal protection during removal of spillages. To clean the floor and all objects contaminated with this component use water.
Spill treatment method	Wear suitable protective clothing. Mix with sand, scoop into a container and hold for disposal or absorb spillage using paper towels or absorbent pad. Wash spill site with water.

7. HANDLING AND STORAGE

HANDLING	Ensure adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. When using do not eat or drink
STORAGE	Store at 2-8°C
Storage Life	Total storage life at recommended conditions 36 months

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respirators	Not applicable though may be used if vapours are irritant.
Eye protection	Splash proof goggles or safety glasses
Gloves	Latex or other light weight gloves
Other	Lab coat
Occupational exposure limits	None set

9. PHYSICAL AND CHEMICAL PROPERTIES

	There are no unusual properties.
Form	Liquid
Colour	Colourless
Odour	None
pH (Value)	7.8
Boiling point (°C)	Not Applicable
Flash Point (°C)	Not Applicable
Flammable limits	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Specific gravity	1.0

10. STABILITY & REACTIVITY

Stable	Under advised storage conditions 36 months
Hazardous reactions	None known
Hazardous Decomposition Products	Not applicable

11. TOXICOLOGICAL INFORMATION

Inhalation	Unlikely route of exposure
Skin contact	Unlikely to cause harmful effects under recommended conditions of handling and use. The only likely symptom would be a local reaction, such as reddening or inflammation, after accidental injection of this product
Eye contact	Unlikely to cause harmful effects under recommended conditions of handling and use. May cause eye irritation. May cause inflammation of conjunctiva and cornea.
Ingestion	Unlikely to cause harmful effects under recommended conditions of handling and use
Long term exposure	Unlikely to cause harmful effects under recommended conditions of handling and use

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classified as Dangerous for Transport

15. REGULATORY INFORMATION

Not classified as Dangerous for Supply/Use

R and S Phrases

In accordance with EU directive 88/379/EEC, it has been determined that the chemical constituents of this product are classified as having no significant hazard, due to the physical/chemical nature and/or concentrations of the ingredients present.

16. OTHER INFORMATION

This part of the data sheet relating to the Wash Solution Concentrate is prepared in accordance with Directive 91/155/EEC (93/112/EC).

The information and recommendations in this data sheet are to the best of our knowledge, information and belief accurate at the date of issue. Nothing herein is to be construed as a warranty, expressed or implied. In all cases it is the responsibility of the users to determine the applicability, of such information or the suitability of the products for their own particular purpose.
