
1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME RHDV Antibody EIA Test Kit

PRODUCT CODE E6-060

SUPPLIER Kalon Biological Limited
Unit G, Perram Works
Merrow Lane
GUILDFORD
GU4 7BN
UK

Telephone +44 (0)1483 301902
Fax +44 (0)1483 301907
Email info@kalonbio.co.uk
Website www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

HSV Antigen ELISA Test Kits contain the following:

Description	Part code	Contents
Microtitre plate in pouch	E6-011	1
RHDV Positive Control	E6-021	1 mL
RHDV Cut-off Calibrator	E6-031	2 mL
RHDV Negative Control	E6-041	1 mL
Tracer Concentrate	E9-051	0.5 mL
Assay Diluent	R1-04	120 mL
Wash Concentrate	R2-04	50 mL
Substrate Solution	R3-02	15 mL
TMB Chromogen	R4-04	0.5 mL
Stop Solution	R5-05	15 mL

The SDS for each reagent is presented separately.

4. FIRST-AID MEASURES

Refer to kit component SDS.

5. FIRE-FIGHTING MEASURES

Refer to kit component SDS.

6. ACCIDENTAL RELEASE MEASURES

Refer to kit component SDS.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to kit component SDS.

9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to kit component SDS.

10. STABILITY AND REACTIVITY

Refer to kit component SDS.

11. TOXICOLOGICAL INFORMATION

Refer to kit component SDS.

12. ECOLOGICAL INFORMATION

Refer to kit component SDS.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	3264	8	III	Corrosive liquid, acidic, inorganic, n.o.s. (sulphuric acid)
<u>IATA</u>	3264	8	III	
<u>IMDG</u>	3264	8	III	

SIGNAGE



ENVIRONMENTAL HAZARDS

RID / ADR	No
IATA	No
IMDG	No

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.	02
Revision Date	03-Jul-2019
Replaces Document Generated	21-Dec-2005

KIT COMPONENTS

	<u>ACCORDING TO REG (EC) NO 1272/2008 [EU-GHS/CLP]</u>
Microtitre Strips	Not classified
RHDV antibody controls	Not classified
Tracer Concentrate	Not classified
Assay Diluent	Not classified
Wash Concentrate	Not classified
Substrate Solution	Not classified
TMB Chromagen	Not classified
Stop Solution	Not classified

Kalon Biological Ltd.

Safety Data Sheet

E6-021, E6-031 and E6-041
RHDV controls
Revision 02– Date 03-Jul-2019
According to regulation (EC) # 1907/2006

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME RHDV controls

PRODUCT NAME RHDV antibody EIA Controls
Rabbit antibody diluted in Tris-buffered Saline with preservative

PRODUCT CODE E6-021, E6-031 and E6-041

SUPPLIER Kalon Biological Limited
Unit G Perram Works
Merrow Lane
GUILDFORD
GU4 7BN
UK

Telephone +44 (0)1483 302007
Fax +44 (0)1483 301907
Email info@kalonbio.co.uk
Website www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Name	EC #	CAS #	Content	Classification
THIOMERSAL	200-210-4	54-64-8	<0.01%	STOT RE 2, Acute Tox. 1, Aquatic Acute 1, Aquatic Chronic 1 H300 H310 H330 H373 H410
TRIS(HYDROXY METHYL)AMINO METHANE	201-064-4	77-86-1	0.5-1%	Skin Irrit. 2, Eye Irrit. 2A, STOT SE 3 H315 H319 H335

4. FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION

Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Coloured Liquid
ODOUR	None
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.01

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	<i>Not regarded as hazardous for transport</i>			
<u>IATA</u>				
<u>IMDG</u>				

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.	02
Revision Date	03-Jul-2019
Comments	CHIP phrases removed
Replaces Document Generated	21-Dec-2005

HAZARD & RISK PHRASES IN FULL

H300	Fatal if swallowed
H310	Fatal in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H373	Causes damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME ASSAY DILUENT
Tris buffer solution with preservative

PRODUCT CODE R1-00, R1-01, R1-02, R1-03, R1-04

SUPPLIER Kalon Biological Limited Telephone +44 (0)1483 302007
Unit G Perram Works Fax +44 (0)1483 301907
Merrow Lane
GUILDFORD Email info@kalonbio.co.uk
GU4 7BN Website www.kalonbio.co.uk
UK

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Name	EC #	CAS #	Content	Classification
THIOMERSAL	200-210-4	54-64-8	<0.01%	STOT RE 2, Acute Tox. 1, Aquatic Acute 1, Aquatic Chronic 1 H300 H310 H330 H373 H410
TRIZMA® BASE	201-064-4	77-86-1	0.5-1%	Skin Irrit. 2, Eye Irrit. 2A, STOT SE 3 H315 H319 H335
BROMOCRESOL PURPLE	204-087-8	115-40-2	<0.1%	Skin Irrit 2, Eye Irrit 2, STOT SE 3 H315 H319 H335
5,5'-Dibromo-o-cresolsulfonphthalein				

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION

Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

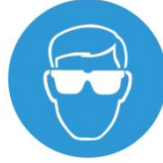
Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Purple Liquid
ODOUR	None
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.03

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	<i>Not regarded as hazardous for transport</i>			
<u>IATA</u>				
<u>IMDG</u>				

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No. 02
Revision Date 15 Oct 2015
Comments CHIP regulations removed
Replaces Document Generated 05 Sep 2013

HAZARD STATEMENTS IN FULL

H300 Fatal if swallowed
H310 Fatal in contact with skin
H315 Causes skin irritation
H319 Causes serious eye irritation
H330 Fatal if inhaled
H335 May cause respiratory irritation
H373 Causes damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME WASH CONCENTRATE
Tris-Buffered Saline

PRODUCT CODE R2-00, R2-01, R2-02, R2-03, R2-04

<u>SUPPLIER</u>	Kalon Biological Limited Unit G Perram Works Merrow Lane GUILDFORD GU4 7BN UK	Telephone	+44 (0)1483 302007
		Fax	+44 (0)1483 301907
		Email	info@kalonbio.co.uk
		Website	www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Name	EC #	CAS #	Content	Classification
TRIZMA® BASE	201-064-4	77-86-1	0.5-1%	Skin Irrit. 2, Eye Irrit. 2A, STOT SE 3 H315 H319 H335

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION

Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Colourless Liquid
ODOUR	None
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.11

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	<i>Not regarded as hazardous for transport</i>			
<u>IATA</u>				
<u>IMDG</u>				

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.

Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.	02
Revision Date	15 Oct 2015
Comments	CHIP regulations removed
Replaces Document Generated	05 Sep 2013

HAZARD STATEMENTS IN FULL

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME SUBSTRATE SOLUTION

PRODUCT CODE R3-00, R3-01, R3-04

<u>SUPPLIER</u>	Kalon Biological Limited Unit G Perram Works Merrow Lane GUILDFORD GU4 7BN UK	Telephone	+44 (0)1483 302007
		Fax	+44 (0)1483 301907
		Email	info@kalonbio.co.uk
		Website	www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Name	EC #	CAS #	Content	Classification
SODIUM PERBORATE TETRAHYDRATE	231-556-4	10486-00-7	<0.1%	Oxid. Sol. 2, Acute Tox. 4, Eye Dam. 1, Repro Tox. 1, STOT SE 3 H272 H302 H318 H335 H360Df
ACETIC ACID	200-580-7	64-19-7	0-1%	Flam. Liq. 3, Skin Corr. 1A H226 H314
ETHYLENE-DIAMINETETRA-ACETIC ACID DISODIUM SALT	205-358-3	6381-92-6	0-1%	Eye Irrit. 2A H319

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION

Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

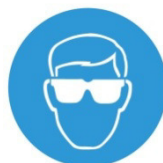
Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Colourless Liquid
ODOUR	None
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.01

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	<i>Not regarded as hazardous for transport</i>			
<u>IATA</u>				
<u>IMDG</u>				

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No. 02
Revision Date 15 Oct 2015
Comments CHIP regulations removed
Replaces Document Generated 05 Sep 2013

HAZARD STATEMENTS IN FULL

H226 Flammable liquid and vapour
H272 May intensify fire; oxidizer
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H360Df May damage fertility

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME TMB CHROMOGEN
Tetramethylbenzidine in DMSO

PRODUCT CODE R4-00, R4-01, R4-04

<u>SUPPLIER</u>	Kalon Biological Limited Unit G Perram Works Merrow Lane GUILDFORD GU4 7BN UK	Telephone	+44 (0)1483 302007
		Fax	+44 (0)1483 301907
		Email	info@kalonbio.co.uk
		Website	www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC #	CAS #	Content	Classification
3,3',5,5'- TETRAMETHYL- BENZIDINE	259-364-6	54827-17-7	0-1%	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3 H315 H319 H335
DIMETHYL- SULFOXIDE	200-664-3	67-86-5	80-100%	
EOSIN B [CI 45400] 4',5'-Dibromo-2',7'-dinitrofluoresceindisodium salt	208-943-1	548-24-3	0-1%	

4. FIRST-AID MEASURES

INHALATION
Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION
Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

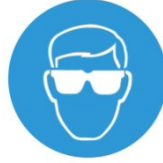
Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Red Liquid
ODOUR	Sweet, solvent
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.10

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	<i>Not regarded as hazardous for transport</i>			
<u>IATA</u>				
<u>IMDG</u>				

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No. 02
Revision Date 15 Oct 2015
Comments CHIP regulations removed
Replaces Document Generated 05 Sep 2013

HAZARD STATEMENTS IN FULL

H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME STOP SOLUTION
0.5 mol/L sulphuric acid

PRODUCT CODES R5-00, R5-01, R5-02, R5-04, R5-05

SUPPLIER Kalon Biological Limited Telephone +44 (0)1483 302007
Unit G Perram Works Fax +44 (0)1483 301907
Merrow Lane
GUILDFORD Email info@kalonbio.co.uk
GU4 7BN Website www.kalonbio.co.uk
UK

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
Not Classified

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]
None required

Hazard statement(s)
Not Classified

Precautionary statement(s)
Not Classified

3. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Name	EC #	CAS #	Content	Classification
SULPHURIC ACID	231-639-5	7664-93-9	1-5%	Skin Corr 1A H314

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air. Perform artificial respiration if breathing has stopped.

INGESTION

Rinse mouth with water. Never make an unconscious person vomit or drink fluids.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Water spray, Alcohol-resistant foam, Dry chemicals, or Carbon dioxide

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid aerosol formation. Avoid breathing aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Flush area with water – do not allow water to enter drains. Absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Avoid aerosol formation. Provide adequate exhaust function where aerosol is likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std	8h TWA	STEL
SULPHURIC ACID	WEL	0.3 mg/m ³	

WEL – Workplace Exposure Limit; 8h TWA – 8-hour Time-Weighted Average; STEL – Short-Term EL.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is possible.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Colourless Liquid
ODOUR	Acidic
SOLUBILITY / MISCIBLE WITH	Water; Ethanol
SPECIFIC GRAVITY	~ 1.01

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

INCOMPATIBLE MATERIALS

Alkalis, Alkali metals

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

EYE CONTACT

May cause eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

None recorded.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

	UN #	Class	Packing	Proper shipping name
<u>RID / ADR</u>	3264	8	III	Corrosive liquid, acidic, inorganic, n.o.s. (sulphuric acid)
<u>IATA</u>	3264	8	III	
<u>IMDG</u>	3264	8	III	

SIGNAGE



ENVIRONMENTAL HAZARDS

RID / ADR	No
IATA	No
IMDG	No

15. REGULATORY INFORMATION

STATUTORY INSTRUMENTS

This MSDS complies with regulation (EC) no. 1907/2006.
Workplace Exposure Limits EH40/2011.

16. OTHER INFORMATION

GENERAL INFORMATION

This safety data sheet covers all codes for this product.

REVISION INFORMATION

Revision No.	04
Revision Date	25 Nov 2015
Comments	Limits reassessed
Replaces Document Generated	15 Oct 2015

HAZARD STATEMENTS IN FULL

H314 Causes severe skin burns and eye damage

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

PRODUCT NAME TMB SUBSTRATE

PRODUCT CODE R7-00, R7-01, R7-02, R7-03

SUPPLIER Kalon Biological Limited
Unit G Perram Works
Merrow Lane
GUILDFORD
GU4 7BN
UK

Telephone +44 (0)1483 302007
Fax +44 (0)1483 301907
Email info@kalonbio.co.uk
Website www.kalonbio.co.uk

2. HAZARDS IDENTIFICATION

CLASSIFICATION ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]

Not a dangerous substance according to GHS.

LABELLING ACCORDING TO REGULATION (EC) No 1272/2008 [EU-GHS/CLP]

No symbols required

Hazard statement(s)

None required

Precautionary statement(s)

None required

3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	EC #	CAS #	Content	Classification
3,3',5,5'-TETRA-METHYLBENZIDINE	259-364-6	54827-17-7	<0.1%	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3 H315 H319 H335

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention if symptoms occur.

INGESTION

Do not induce vomiting. Rinse mouth with water. Never make an unconscious person vomit or drink fluids. Get medical attention if symptoms occur.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water. Get medical attention if symptoms occur.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use: Firefighting media appropriate for surrounding materials.

PROTECTIVE MEASURES IN FIRE

Self-contained breathing apparatus if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate personnel to a safe area. Avoid breathing mist / aerosols. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not allow spillage to enter watercourses, drains or sewers. Stop further spillage if possible without risk.

SPILL CLEAN-UP METHODS

Avoid raising aerosols. Flush area with water, absorb with disposable towels and hold for hazardous disposal – see section 13.

7. HANDLING & STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Provide adequate exhaust function where aerosols are likely.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place.

STORAGE CLASS

Chemical storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

PROTECTIVE EQUIPMENT



HAND PROTECTION

Use protective gloves. The most suitable glove should be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Wear approved, tight-fitting safety glasses where splashing is probable.

RESPIRATORY EQUIPMENT

Self-contained breathing apparatus where aerosols are likely.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Pale Yellow - Colourless liquid
ODOUR	None
SOLUBILITY / MISCIBLE WITH	Water, ethanol
SPECIFIC GRAVITY	~ 1.01
pH	3.3 – 3.8

10. STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Moisture

INCOMPATIBLE MATERIALS

Strong oxidisers, Metals

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides, Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

INHALATION

May be harmful if inhaled. May cause respiratory tract irritation.

INGESTION

May be harmful if swallowed.

SKIN CONTACT

May be harmful if absorbed through skin. May cause skin irritation.

