

Material Safety Data Sheets

ImPath ISH Detection Kit Catalog#: 44996

MSDS

**Dewax Solution 3A,3B,3C,3D,3E
Dewax Solution 4
Retrieval Solution for ISH
Pepsin**

Company Pathcom Systems Corp
6759 Sierra Ct. Suite# L
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SAFETY DATA SHEET



DEWAX SOLUTION 3A,3B,3C,3D,3E

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Issued: 11/08/2012

Revision No: 1

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

1.1. Product identifier

Product: Dewax Solution 3a, 3b, 3c, 3d, 3e
Catalog No.: R021-A, -B, -C, -D, -E

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: *In Situ* Hybridization (ISH)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER	EMAIL ADDRESS
PathCom Systems, Inc. 6759 Sierra Ct. Ste#B Dublin, CA 94568	info@pathcomx.com

DISTRIBUTOR

Menarini Diagnostics LTD
405 Wharfedale Road,
Winnersh-Workingham
Berkshire RG415RA

1.4. Emergency telephone number

Tel. 925-829-5500 (9 am-6 pm PST, M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Not classified
	Human health	Not classified
	Environment	Not classified
Classification (1999/45/EEC)	Not classified	

2.2. Label elements

Contains ETHYLENE GLYCOL MONOMETHYL ETHER
Label In Accordance With (EC) No. 1272/2008



Signal word: Warning

Hazard statement(s)

H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P305+ P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

ETHYLENE GLYCOL MONOMETHYL ETHER <10%

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CAS-No.: 109-86-4

EC No.: 203-713-7

Classification (EC 1272/2008)
Flammable liquid. 3 - H226
Repr. Tox.1B – H360
Acute Tox. 4 – H302
Acute Tox. 4 – H312
Acute Tox. 4 –H332

Classification (67/548/EEC)
R10
Repr. 2 – R60-61
Xn; R-20/21/22

DIETHYLENE GLYCOL BUTYL ETHER <10%

CAS-No.:112-34-5

EC No.:203-961-6

Classification (EC 1272/2008)
Eye Irrit. 2H319

Classification (67/548/EEC)
Xi; R36

CITRIC ACID

<1%

CAS-No.:77-92-9

EC No.: 201-069-1

Classification (EC 1272/2008)
Eye Irrit. 2 H319

Classification (67/548/EEC)
Xi; Irritant
R36: Irritating to eyes

TRITON X-100

<1%

CAS-No.:9002-93-1

EC No.:

Classification (EC 1272/2008)
H319

Classification (67/548/EEC)
R41

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

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

Inhalation.

May cause coughing or mild irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin contact may cause redness and irritation.

Eye contact

May cause eye irritation.

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

No specific first aid measures noted.

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

None under normal conditions.

Unusual Fire & Explosion Hazards

None.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective Measures In Fire

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at specified temperature. Refer to product label.

Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name:

ETHYLENE GLYCOL MONOMETHYL ETHER

Workplace Exposure Limit

UK - 8 hour TWA: 0.3 mg/m³

UK - 15 min. STEL: Not determined

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

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Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colorless
Odour	Odorless
pH	Not determined
Solubility	miscible in water.
Initial boiling point and boiling range	Not determined
Melting point (°C)	Not determined
Relative density	Not determined
Vapour density (air=1)	Not determined
Vapour pressure	Not determined
Evaporation rate	Not determined
Viscosity	Not determined
Solubility Value (G/100G H ₂ O@20°C)	Not determined
Decomposition temperature (°C)	Not determined
Flash point	Not applicable
Auto Ignition Temperature (°C)	Not determined
Flammability Limit - Lower(%)	Not applicable
Flammability Limit - Upper(%)	Not applicable
Partition Coefficient (N-Octanol/Water)	Not determined
Explosive properties	Not applicable
Oxidising properties	Does not meet the criteria for oxidizing

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid Strong alkalis

10.6. Hazardous decomposition products

None under normal conditions

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information	No information available
Acute Toxicity (Oral LD50)	Not determined
Skin Corrosion/Irritation:	
Human Skin Model Test	Not determined
Serious eye damage/irritation:	
Moderate eye irritation	Not determined
Respiratory sensitization	Did not cause sensitization on laboratory animals
Skin sensitization	Did not cause sensitization on laboratory animals
Germ cell mutagenicity (In Vitro):	Not mutagenic in Ames Test
Carcinogenicity	Not determined
Reproductive Toxicity – Fertility	Not determined
Specific target organ toxicity - single exposure:	
STOT - Single exposure	Not determined
Specific target organ toxicity - repeated exposure:	
STOT - Repeated exposure	Not determined
Aspiration hazard	Not determined
Inhalation	
Ingestion	May be harmful if inhaled. Causes respiratory tract irritation
Skin contact	May be harmful if absorbed through skin. Causes skin irritation.
Eye contact	Causes eye irritation.
Health Warnings	Not determined
Route of entry	Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Fish Toxicity: LC50 – Not determined

12.2. Persistence and degradability

Degradability: This product is expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility: The product is miscible in water.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA,ADR/RID).

Road Transport Notes	Not Classified
Rail Transport Notes	Not classified
Sea Transport Notes	Not classified
Air Transport Notes	Not classified

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information	only trained personnel should use this material.
SDS No.:	Revision No. 1
Date:	11/08/2012
Risk Phrases In Full	
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R36	Irritating to eyes
R41	Risk of serious damage to eyes
R10	Flammable
R60-61	May impair fertility or cause harm to the unborn baby

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DEWAX SOLUTION 3A,3B,3C,3D,3E



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Hazard Statements In Full

H226	Flammable liquid and vapor
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H312	Harmful in contact with skin
H313	May be harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or unborn baby

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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RETRIEVAL SOLUTION FOR ISH

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Revision No: 1

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

1.1. Product identifier

Product: Dewax Solution 4
Catalog No.: R022

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: In Situ Hybridization (ISH)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER EMAIL ADDRESS
PathCom Systems, Inc. info@pathcomx.com
6759 Sierra Ct. Ste#B
Dublin, CA 94568

DISTRIBUTOR

Menarini Diagnostics LTD

405 Wharfedale Road,
Winnersh-Workingham
Berkshire RG415RA

1.4. Emergency telephone number

Tel. 925-829-5500 (9 am-6 pm PST, M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)
Physical and Chemical Hazards Not classified
Human health Not classified
Environment Not classified
Classification (1999/45/EEC) Not classified

2.2. Label elements

Contains ETHYLENE GLYCOL MONOMETHYL ETHER
Label In Accordance With (EC) No. 1272/2008



Signal word Warning

Hazard statement(s)

H303 May be harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P305+ P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

ETHYLENE GLYCOL MONOMETHYL ETHER <10%

CAS-No.: 109-86-4 EC No.: 203-713-7

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Classification (EC 1272/2008)
Flammable liquid. 3 - H226
Repr. Tox.1B – H360
Acute Tox. 4 – H302
Acute Tox. 4 – H312
Acute Tox. 4 –H332

Classification (67/548/EEC)
R10
Repr. 2 – R60-61
Xn; R-20/21/22

DIETHYLENE GLYCOL BUTYL ETHER <10%

CAS-No.:112-34-5

EC No.:203-961-6

Classification (EC 1272/2008)
Eye Irrit. 2H319
N-ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE <0.05%

Classification (67/548/EEC)
Xi; R36

CAS-No.:8001-54-5

EC No.: Unlisted

Classification (EC 1272/2008)
Acute Tox. 4 – H302
Acute Tox. 4 – H312
Skin Corr. 1B – H314
Aquatic Acute 1 – H400

Classification (67/548/EEC)
Xn;R21/22
C;R34
N;R50

TRIZMA BASE

<1%

CAS:77-86-1

EC No.: 201-064-4

Classification (EC 1272/2008)
Skin Irrit. 2 H315
H319
STOT SE 3 H335

Classification (67/548/EEC)
Xi: 36/37/38

SODIUM CHLORIDE
CAS:7647-14-5

<1%
EC No: 231-598-3

Classification (EC 1272/2008)
Not classified

Classification (67/548/EEC)
Not classified

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

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

Inhalation.

May cause coughing or mild irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin contact may cause redness and irritation.

Eye contact

May cause eye irritation.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

None under normal conditions.

Unusual Fire & Explosion Hazards

None.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective Measures In Fire

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at specified temperature. Refer to product label.

Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name:

ETHYLENE GLYCOL MONOMETHYL ETHER

Workplace Exposure Limit

UK - 8 hour TWA: 0.3 mg/m³

UK - 15 min. STEL: Not determined

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

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- Provide eyewash station.
- Engineering measures
Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.
- Respiratory equipment
No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.
- Hand protection
Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.
- Eye protection
If risk of splashing, wear safety goggles or face shield.
- Other Protection
Wear appropriate clothing to prevent any possibility of skin contact.
- Hygiene measures
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
- Skin protection
Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colorless
Odour	Odorless
pH	Not determined
Solubility	soluble in water.
Initial boiling point and boiling range	Not determined
Melting point (°C)	Not determined
Relative density	Not determined
Vapour density (air=1)	Not determined
Vapour pressure	Not determined
Evaporation rate	Not determined
Viscosity	Not determined
Solubility Value (G/100G H ₂ O@20°C)	Not determined
Decomposition temperature (°C)	Not determined
Flash point	Not applicable
Auto Ignition Temperature (°C)	Not determined
Flammability Limit - Lower(%)	Not applicable
Flammability Limit - Upper(%)	Not applicable
Partition Coefficient (N-Octanol/Water)	Not determined
Explosive properties	Not applicable
Oxidising properties	Does not meet the criteria for oxidizing

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid Strong alkalis

10.6. Hazardous decomposition products

None under normal conditions

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information	No information available
Acute Toxicity (Oral LD50)	Not determined
Skin Corrosion/Irritation:	
Human Skin Model Test	Not determined
Serious eye damage/irritation:	
Moderate eye irritation	Not determined
Respiratory sensitization	Did not cause sensitization on laboratory animals
Skin sensitization	Did not cause sensitization on laboratory animals
Germ cell mutagenicity (In Vitro):	Not mutagenic in Ames Test
Carcinogenicity	Not determined
Reproductive Toxicity – Fertility	Not determined
Specific target organ toxicity - single exposure:	
STOT - Single exposure	Not determined
Specific target organ toxicity - repeated exposure:	
STOT - Repeated exposure	Not determined
Aspiration hazard	Not determined
Inhalation	
	May be harmful if inhaled. Causes respiratory tract irritation
Ingestion	
	May be harmful if swallowed.
Skin contact	
	May be harmful if absorbed through skin. Causes skin irritation.
Eye contact	
	Causes eye irritation.
Health Warnings	
	Known or suspected mutagen. Known or suspected carcinogen for humans.
Route of entry	
	Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Fish Toxicity LC50 – Not determined

12.2. Persistence and degradability

Degradability
This product is expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility: The product is soluble in water.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

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General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA,ADR/RID).

Road Transport Notes	Not Classified
Rail Transport Notes	Not classified
Sea Transport Notes	Not classified
Air Transport Notes	Not classified

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information	only trained personnel should use this material.
SDS No.:	Revision No. 1
Date:	11/08/2012
Risk Phrases In Full	

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R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R34	Causes burns by radioactive decay
R36	Irritating to eyes
R10	Flammable
R60-61	May impair fertility or cause harm to the unborn baby

Hazard Statements In Full

H226	Flammable liquid and vapor
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation
H360	May damage fertility or unborn baby
H400	Hazardous to the aquatic environment

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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RETRIEVAL SOLUTION FOR ISH

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Issued: 11/08/2012

Revision No: 1

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

1.1. Product identifier

Product: Retrieval Solution for ISH
Catalog No.: R005

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: *In Situ* Hybridization (ISH)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER	EMAIL ADDRESS
PathCom Systems, Inc. 6759 Sierra Ct. Ste#B Dublin, CA 94568	info@pathcomx.com

DISTRIBUTOR

Menarini Diagnostics LTD
405 Wharfedale Road,
Winnersh-Workingham
Berkshire RG415RA

1.4. Emergency telephone number

Tel. 925-829-5500 (9 am-6 pm PST, M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Not classified
	Human health	Not classified
	Environment	Not classified
Classification (1999/45/EEC)	Not classified	

2.2. Label elements

Contains
Label In Accordance With (EC) No. 1272/2008
Not classified

Supplemental Label Information (EU)

EUH210

Safety data sheet available on request.

2.3. Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

SODIUM CITRATE DIHYDRATE CAS:6132-04-3	<0.3% EC No.: 200-675-3
Classification (EC 1272/2008) Not classified	Classification (67/548/EEC) Not classified
HYDROCHLORIC ACID CAS:7647-01-0	<0.1% EC No.: 231-595-7
Classification (EC 1272/2008) Skin Corr. 1B – H314 STOT SE 3 – H335	Classification (67/548/EEC) C;R34 Xi;R37

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

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

Inhalation.

May cause coughing or mild irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin contact may cause redness and irritation.

Eye contact

May cause eye irritation.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

None under normal conditions.

Unusual Fire & Explosion Hazards

None.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective Measures In Fire

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at specified temperature. Refer to product label.
Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name: HYDROCHLORIC ACID
Workplace Exposure Limit UK - 8 hour TWA: 2 mg/m³ UK - 15 min. STEL: 8 mg/m³

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colorless
Odour	Odorless
pH	6.0
Solubility	soluble in water.
Initial boiling point and boiling range	Not determined
Melting point (°C)	Not determined
Relative density	Not determined
Vapour density (air=1)	Not determined
Vapour pressure	Not determined
Evaporation rate	Not determined
Viscosity	Not determined
Solubility Value (G/100G H ₂ O@20°C)	Not determined
Decomposition temperature (°C)	Not determined
Flash point	Not applicable

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Auto Ignition Temperature (°C)	Not determined
Flammability Limit - Lower(%)	Not applicable
Flammability Limit - Upper(%)	Not applicable
Partition Coefficient (N-Octanol/Water)	Not determined
Explosive properties	Not applicable
Oxidising properties	Does not meet the criteria for oxidizing

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid Strong alkalis

10.6. Hazardous decomposition products

None under normal conditions

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information	No information available
Acute Toxicity (Oral LD50)	Not determined
Skin Corrosion/Irritation:	
Human Skin Model Test	Not determined
Serious eye damage/irritation:	
Moderate eye irritation	Not determined
Respiratory sensitization	Did not cause sensitization on laboratory animals
Skin sensitization	Did not cause sensitization on laboratory animals
Germ cell mutagenicity (In Vitro):	Not mutagenic in Ames Test
Carcinogenicity	Not determined
Reproductive Toxicity – Fertility	Not determined
Specific target organ toxicity - single exposure:	
STOT - Single exposure	Not determined
Specific target organ toxicity - repeated exposure:	
STOT - Repeated exposure	Not determined
Aspiration hazard	Not determined
Inhalation	
May be harmful if inhaled. Causes respiratory tract irritation	
Ingestion	
May be harmful if swallowed.	
Skin contact	
May be harmful if absorbed through skin. Causes skin irritation.	
Eye contact	
Causes eye irritation.	
Health Warnings	
Known or suspected mutagen. Known or suspected carcinogen for humans.	
Route of entry	
Ingestion. Skin and/or eye contact.	

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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Fish Toxicity LC50 – Not determined

12.2. Persistence and degradability

Degradability

This product is expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA,ADR/RID).

Road Transport Notes Not Classified

Rail Transport Notes Not classified

Sea Transport Notes Not classified

Air Transport Notes Not classified

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information only trained personnel should use this material.

SDS No.: Revision No. 1

Date: 11/08/2012

Risk Phrases In Full

R34 Causes burns by radioactive decay

R37 Irritating to respiratory system

Hazard Statements In Full

H314 Causes severe skin burns and eye damage

H335 May cause respiratory irritation

Disclaimer

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Issued: 11/08/2012

Revision No: 1

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

1.1. Product identifier

Product: Pepsin
Catalog No.: M014

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Immunohistochemistry (IHC) and In Situ Hybridization (ISH)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER EMAIL ADDRESS
PathCom Systems, Inc. info@pathcomx.com
6759 Sierra Ct. Ste#B
Dublin, CA 94568

DISTRIBUTOR

Menarini Diagnostics LTD
405 Wharfedale Road,
Winnersh-Workingham
Berkshire RG415RA

1.4. Emergency telephone number

Tel. 925-829-5500 (9 am-6 pm PST, M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Not classified
	Human health	Not classified
	Environment	Not classified
Classification (1999/45/EEC)	Not classified	

2.2. Label elements

Contains
Label In Accordance With (EC) No. 1272/2008
Not classified

Supplemental Label Information (EU)

EUH210

Safety data sheet available on request.

2.3. Other hazards

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

SODIUM AZIDE	<0.1%
CAS:26628-22-8	EC No.: 247-852-1

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox.2 H300	R27/28, R32, R50/53
Acute Tox.1 H310	
Aquatic Acute 1 H400	
Aquatic Chronic 1 H410	

HYDROCHLORIC ACID	<1%
CAS:7647-01-0	EC No: 231-595-7

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 3 H331	C, R34, R37
Skin Corr. 1A H314	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

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

Inhalation.

May cause coughing or mild irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin contact may cause redness and irritation.

Eye contact

May cause eye irritation.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products

None under normal conditions.

Unusual Fire & Explosion Hazards

None.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective Measures In Fire

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

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6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at specified temperature. Refer to product label.

Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name: HYDROCHLORIC ACID

Workplace Exposure Limit UK - 8 hour TWA: 2 mg/m³ UK - 15 min. STEL: 8 mg/m³

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Light blue
Odour	Odorless
pH	2.0
Solubility	soluble in water.
Initial boiling point and boiling range	Not determined
Melting point (°C)	Not determined
Relative density	Not determined
Vapour density (air=1)	Not determined
Vapour pressure	Not determined
Evaporation rate	Not determined
Viscosity	Not determined
Solubility Value (G/100G H ₂ O@20°C)	Not determined

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Decomposition temperature (°C)	Not determined
Flash point	Not applicable
Auto Ignition Temperature (°C)	Not determined
Flammability Limit - Lower(%)	Not applicable
Flammability Limit - Upper(%)	Not applicable
Partition Coefficient (N-Octanol/Water)	Not determined
Explosive properties	Not applicable
Oxidising properties	Does not meet the criteria for oxidizing

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid Strong alkalis

10.6. Hazardous decomposition products

None under normal conditions

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information	No information available
Acute Toxicity (Oral LD50)	Not determined
Skin Corrosion/Irritation:	
Human Skin Model Test	Not determined
Serious eye damage/irritation:	
Moderate eye irritation	Not determined
Respiratory sensitization	Did not cause sensitization on laboratory animals
Skin sensitization	Did not cause sensitization on laboratory animals
Germ cell mutagenicity (In Vitro):	Not mutagenic in Ames Test
Carcinogenicity	Not determined
Reproductive Toxicity – Fertility	Not determined
Specific target organ toxicity - single exposure:	
STOT - Single exposure	Not determined
Specific target organ toxicity - repeated exposure:	
STOT - Repeated exposure	Not determined
Aspiration hazard	Not determined
Inhalation	
May be harmful if inhaled. Causes respiratory tract irritation	
Ingestion	
May be harmful if swallowed.	
Skin contact	
May be harmful if absorbed through skin. Causes skin irritation.	
Eye contact	
Causes eye irritation.	
Health Warnings	
Known or suspected mutagen. Known or suspected carcinogen for humans.	
Route of entry	

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Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Fish Toxicity LC50 – 1108 ppm/1h

12.2. Persistence and degradability

Degradability
This product is expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility: The product is soluble in water.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road Transport Notes Not Classified

Rail Transport Notes Not classified

Sea Transport Notes Not classified

Air Transport Notes Not classified

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information only trained personnel should use this material.

SDS No.: Revision No. 1

Date: 11/08/2012

Risk Phrases In Full

R27 Very toxic in contact with skin

R28 Very toxic if swallowed

R32 Contact with acids liberates very toxic gas

R34 Causes burns by radioactive decay

R37 Irritating to respiratory system

R50 Very toxic to aquatic organisms

R53 May cause long-term adverse effects in the aquatic environment

Hazard Statements In Full

H300 Fatal if swallowed

H310 Acute toxicity (dermal),

H331 Acute toxicity (inhale)

H314 Causes severe skin burns and eye damage

H400 Hazardous to the aquatic environment

H410 Very toxic to aquatic life with long lasting effects

Disclaimer

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