

Kit:

Product code	Product Name
AD-FA-16	Adellgene Friedreich's Ataxia

Kit components:

• Box 1:

Product code	Product Name
AD-FA-PM1	Adellgene Friedreich's Ataxia Primer Mix1
AD-FA-PM2	Adellgene Friedreich's Ataxia Primer Mix 2
AD-FA-POM1	Adellgene Friedreich's Ataxia Polymerase Mix 1
AD-FA-POM2	Adellgene Friedreich's Ataxia Polymerase Mix 2

• Box 2:

Product code	Product Name
AD-CB	Capture buffer
AD-EB	Elution buffer
AD-WB	Wash buffer

AD-FA-PM1-AdelIgene Friedreich's Ataxia Primer Mix1



Version: 03 Revision date: 20/04/2020

Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name:Adellgene Friedreich's Ataxia Primer Mix1Product Code:AD-FA-PM1

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

Primer Mix for the determination of the number of GAA repeats in the first intron of FXN gene, in healthy, premutated and mutated (until 200) repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eve contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM1-AdelIgene Friedreich's Ataxia Primer Mix1



Version: 03 Revision date: 20/04/2020 Page 2 of 7 Print date: 20/04/2020

Skin contact.

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8. For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM1-Adellgene Friedreich's Ataxia Primer Mix1



Page 3 of 7

Version: 03 Revision date: 20/04/2020

Print date: 20/04/2020

The product does not require special handling measures, the following general measures are recommended: For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product between -18°C and -30°C, in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	Primer Mix for the determination of the number of GAA repeats in the first intron of FXN gene, in healthy, premutated and mutated (until 200) repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.
Breathing prote	ction:
If the recommend	led technical measures are observed, no individual protection equipment is necessary.
Hand protection	
PPE:	Protective gloves.
Characteristics:	«CE» marking, category II.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.
Material:	PVC (polyvinyl chloride) Breakthrough time (min.): > 480 Material thickness (mm): 0,35
Eye protection:	
If the product is h	andled correctly, no individual protection equipment is necessary.
Skin protection:	
PPE:	Protective clothing.
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards:	EN 340
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Work footwear.
Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN 20347

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM1-AdelIgene Friedreich's Ataxia Primer Mix1



Version: 03

Revision date: 20/04/2020

Page 4 of 7 Print date: 20/04/2020

Maintenance:This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should
not be used by other people.Observations:Work footwear for professional use includes protection elements aimed at protecting users against any
injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: N.A./N.A. Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density:N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: Completely miscible Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date noted on vial (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

AD-FA-PM1-AdelIgene Friedreich's Ataxia Primer Mix1



Version: 03

Revision date: 20/04/2020

Page 5 of 7 Print date: 20/04/2020

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM1-Adellgene Friedreich's Ataxia Primer Mix1



Version: 03

Page 6 of 7 Print date: 20/04/2020

Revision date: 20/04/2020

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description: ADR: Transportation is not dangerous. IMDG: Transportation is not dangerous. ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

AD-FA-PM1-AdelIgene Friedreich's Ataxia Primer Mix1



Version: 03 Revision date: 20/04/2020

Page 7 of 7 Print date: 20/04/2020

Abbreviations and acronyms used:CEN:European Committee for Standardization.PPE:Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

SAFETY DATA SHEET (in accordance with Regulation (EU) 2015/830) AD-FA-PM2-AdelIgene Friedreich's Ataxia



Primer Mix 2 Version: 03

Revision date: 20/04/2020

Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name:Adellgene Friedreich's Ataxia Primer Mix 2Product Code:AD-FA-PM2

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

Primer Mix for the determination of the status of mutated alelles of >200 repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM2-Adellgene Friedreich's Ataxia Primer Mix 2



Version: 03 Revision date: 20/04/2020 Page 2 of 7 Print date: 20/04/2020

Skin contact.

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8. For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM2-Adellgene Friedreich's Ataxia Primer Mix 2



Version: 03 Revision date: 20/04/2020

Page 3 of 7 Print date: 20/04/2020

The product does not require special handling measures, the following general measures are recommended: For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product between -18°C and -30°C, in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Primer Mix for the determination of the status of mutated alelles of >200 repeats, in DNA		
	samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.		
Breathing protec			
	d technical measures are observed, no individual protection equipment is necessary.		
Hand protection:			
PPE:	Protective gloves.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)Breakthrough time (min.):> 480Material thickness (mm):0,35		
Eye protection:			
If the product is ha	ndled correctly, no individual protection equipment is necessary.		
Skin protection:			
PPE:	Protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		
PPE:	Work footwear.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN ISO 13287, EN 20347		

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM2-AdelIgene Friedreich's Ataxia Primer Mix 2



Version: 03

Revision date: 20/04/2020

Page 4 of 7 Print date: 20/04/2020

Maintenance:This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should
not be used by other people.Observations:Work footwear for professional use includes protection elements aimed at protecting users against any
injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: N.A./N.A. Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density:N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: Completely miscible Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date noted on vial (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

AD-FA-PM2-Adellgene Friedreich's Ataxia Primer Mix 2



Version: 03

Revision date: 20/04/2020

Page 5 of 7 Print date: 20/04/2020

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

(in accordance with Regulation (EU) 2015/830)

AD-FA-PM2-Adellgene Friedreich's Ataxia Primer Mix 2



Version: 03

Page 6 of 7 Print date: 20/04/2020

Revision date: 20/04/2020

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description: ADR: Transportation is not dangerous. IMDG: Transportation is not dangerous. ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

AD-FA-PM2-Adellgene Friedreich's Ataxia Primer Mix 2



Version: 03 Revision date: 20/04/2020

Page 7 of 7 Print date: 20/04/2020

Abbreviations and acronyms used:CEN:European Committee for Standardization.PPE:Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

AD-FA-POM1-Adellgene Friedreich's Ataxia Polymerase Mix 1



Version: 03

Revision date: 20/04/2020

Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name:Adellgene Friedreich's Ataxia Polymerase Mix 1Product Code:AD-FA-POM1

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

Reaction Mix for the determination of the number of GAA repeats in the first intron of FXN gene, in healthy, premutated and mutated (until 200) repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM1-Adellgene Friedreich's Ataxia Polymerase Mix 1



Version: 03

Revision date: 20/04/2020

Page 2 of 7 Print date: 20/04/2020

Skin contact.

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8. For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM1-Adellgene Friedreich's Ataxia Polymerase Mix 1



Version: 03

Revision date: 20/04/2020

Page 3 of 7 Print date: 20/04/2020

The product does not require special handling measures, the following general measures are recommended: For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product between -18°C and -30°C, in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	Reaction Mix for the determination of the number of GAA repeats in the first intron of FXN gene, in healthy, premutated and mutated (until 200) repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.
Breathing prote	
If the recommend	led technical measures are observed, no individual protection equipment is necessary.
Hand protection	
PPE: Characteristics:	Protective gloves. «CE» marking, category II.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.
Material:	PVC (polyvinyl chloride) Breakthrough time (min.): > 480 Material thickness (mm): 0,35
Eye protection:	
If the product is h	andled correctly, no individual protection equipment is necessary.
Skin protection:	
PPE:	Protective clothing.
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards:	EN 340
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Work footwear.
Characteristics: CEN standards:	«CE» marking, category II. EN ISO 13287, EN 20347
CEN Stanuarus:	LIN 130 13207, LIN 20347

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM1-Adellgene Friedreich's Ataxia Polymerase Mix 1



Version: 03

Revision date: 20/04/2020

Page 4 of 7 Print date: 20/04/2020

 Maintenance:
 This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.

 Observations:
 Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: > 60 °C Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density:N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: Completely miscible Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date noted on vial (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

AD-FA-POM1-Adellgene Friedreich's Ataxia Polymerase Mix 1



Version: 03

Revision date: 20/04/2020

Page 5 of 7 Print date: 20/04/2020

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM1-AdelIgene Friedreich's Ataxia Polymerase Mix 1



Print date: 20/04/2020

Page 6 of 7

Version: 03

Revision date: 20/04/2020

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description: ADR: Transportation is not dangerous. IMDG: Transportation is not dangerous. ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

AD-FA-POM1-Adeligene Friedreich's Ataxia Polymerase Mix 1



Version: 03 Revision date: 20/04/2020

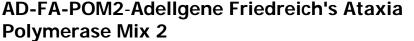
Page 7 of 7 Print date: 20/04/2020

Abbreviations and acronyms used:CEN:European Committee for Standardization.PPE:Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.





Version: 03 Revision date: 20/04/2020 Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

 Product Name:
 Adellgene Friedreich's Ataxia Polymerase Mix 2

 Product Code:
 AD-FA-POM2

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

Reaction Mix for the determination of the status of mutated alelles of >200 repeats, in DNA samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eve contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM2-Adellgene Friedreich's Ataxia Polymerase Mix 2



Version: 03

Revision date: 20/04/2020

Page 2 of 7 Print date: 20/04/2020

Skin contact.

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8. For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM2-Adellgene Friedreich's Ataxia Polymerase Mix 2



Version: 03

Revision date: 20/04/2020

Page 3 of 7 Print date: 20/04/2020

The product does not require special handling measures, the following general measures are recommended: For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product between -18°C and -30°C, in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %	
Uses:	Reaction Mix for the determination of the status of mutated alelles of >200 repeats, in DNA	
Breathing protect	samples, through PCR followed by fluorescent fragment analysis in genetic analyzer.	
	technical measures are observed, no individual protection equipment is necessary.	
Hand protection:		
PPE:	Protective gloves.	
Characteristics:	«CE» marking, category II.	
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420	
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.	
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.	
Material:	PVC (polyvinyl chloride) Breakthrough time (min.): > 480 Material thickness (mm): 0,35	
Eye protection:		
If the product is han	dled correctly, no individual protection equipment is necessary.	
Skin protection:		
PPE:	Protective clothing.	
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.	
CEN standards:	EN 340	
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.	
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.	
PPE:	Work footwear.	
Characteristics:	«CE» marking, category II.	
CEN standards:	EN ISO 13287, EN 20347	

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM2-AdelIgene Friedreich's Ataxia Polymerase Mix 2



Version: 03

Revision date: 20/04/2020

Page 4 of 7 Print date: 20/04/2020

Maintenance:This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should
not be used by other people.Observations:Work footwear for professional use includes protection elements aimed at protecting users against any
injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: > 60 °C Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density:N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: Completely miscible Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date noted on vial (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.





Version: 03

Revision date: 20/04/2020

Page 5 of 7 Print date: 20/04/2020

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

(in accordance with Regulation (EU) 2015/830)

AD-FA-POM2-Adellgene Friedreich's Ataxia Polymerase Mix 2



Print date: 20/04/2020

Page 6 of 7

Version: 03

Revision date: 20/04/2020

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description: ADR: Transportation is not dangerous. IMDG: Transportation is not dangerous. ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

SAFETY DATA SHEET (in accordance with Regulation (EU) 2015/830) AD-FA-POM2-Adellagene Friedrei





Version: 03 Revision date: 20/04/2020

Page 7 of 7 Print date: 20/04/2020

Abbreviations and acronyms used:CEN:European Committee for Standardization.PPE:Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 1 of 9 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name: Product Code: Capture Buffer AD-CB

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

Purification of PCR products.

Uses advised against: Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

In accordance with Regulation (EU) No 1272/2008: Acute Tox. 4 : Harmful in contact with skin. Acute Tox. 4 : Harmful if inhaled. Aquatic Chronic 3 : Harmful to aquatic life with long lasting effects. Acute Tox. 4 : Harmful if swallowed.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008: Pictograms:



 Signal Word:

 Warning

 H statements:

 H302
 Harmful if swallowed.

 H412
 Harmful to aquatic life with long lasting effects.

 H312+H332
 Harmful in contact with skin or if inhaled.

Contains: acetic acid Guanidinium thiocyanate

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer



Version: 01 Revision date: 20/04/2020

Page 2 of 9 Print date: 20/04/2020

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
Identifiers			Classification	specific concentration limit
CAS No: 593-84-0 EC No: 209-812-1	Guanidinium thiocyanate	25 - 50 %	Acute Tox. 4, H312 - Acute Tox. 4, H332 - Acute Tox. 4, H302 - Aquatic Chronic 3, H412 - Skin Corr. 1C, H314	-
Index No: 607-002- 00-6 CAS No: 64-19-7 EC No: 200-580-7 Registration No: 01- 2119475328-30-XXXX	[1] acetic acid	1 - 10 %	Flam. Liq. 3, H226 - Skin Corr. 1A, H314	Skin Corr. 1A, H314: $C \ge 90$ % Skin Corr. 1B, H314: 25 % \le C < 90 % Skin Irrit. 2, H315: 10 % \le C < 25 % Eye Irrit. 2, H319: 10 % \le C < 25 %

(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Eve contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer



Version: 01

Revision date: 20/04/2020

Page 3 of 9 Print date: 20/04/2020

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract.

SECTION 5: FIREFIGHTING MEASURES.

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8. For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 4 of 9 Print date: 20/04/2020

Store according to local legislation. Observe indications on the label. Store the containers between 18 and 30° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
	64-19-7	European	Eight hours	10	25
		Union [1]	Short term	20	50
		United States	Eight hours	10	
acetic acid		[2] (Cal/OSHA)	Short term	15 (Ceiling) 40	
		United States	Eight hours	10	
		[3] (NIOSH)	Short term	15	
		United States	Eight hours	10	25
		[4] (OSHA)	Short term		

[1] According both Binding Occupational Esposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

[2] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[3] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health,

Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.

[4] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs),

California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Туре	Value
acetic acid	DNEL	Inhalation, Long-term, Local effects	25
CAS No: 64-19-7	(Workers)		(mg/m ³)
EC No: 200-580-7			

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated. DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Purification of PCR products.		
Breathing protecti	on:		
PPE:	Filter mask for protection against gases and particles.		
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.		
CEN standards:	EN 136, EN 140, EN 405		
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.		
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.		
Filter Type needed:	A2		

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01

Revision date: 20/04/2020



Page 5 of 9 Print date: 20/04/2020

Hand protection						
PPE:	Non-disposable protective gloves against chemicals.					
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.					
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420					
	A schedule for the periodical replacement of gloves should be established in order to guarantee their					
Maintenance:	than not using gloves, since the pollutant can gradually accumulate in the glove's material.					
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.					
Material:	PVC (polyvinyl chloride)Breakthrough time (min.):> 480Material thickness (mm):0,35					
Eye protection:						
PPE:	Protective goggles with built-in frame.					
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.					
CEN standards:	EN 165, EN 166, EN 167, EN 168					
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.					
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.					
Skin protection:						
PPE:	Chemical protective clothing					
	«CE» marking, category III. Clothing should fit properly. The level of protection					
Characteristics:	must be set according to a test parameter called BT (Breakthrough Time), which					
	indicates how long it takes for the chemical to pass through the material.					
CEN standards:	EN 464,EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034					
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by					
	the manufacturer. The protective clothing's design should facilitate correct positioning, staying in place without moving for					
Observations:	the period of use expected, bearing in mind environmental factors as well as any movement or position					
observations.	the user might adopt while carrying out the activity.					
PPE:	Anti-static safety footwear against chemicals.					
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear					
Characteristics:	is resistant.					
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345					
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.					
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.					

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Líquido Colour: Yellowish. Orange. Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: 44 °C Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density:N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: N.A./N.A.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 6 of 9 Print date: 20/04/2020

Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date (see section 7). 10.3 Possibility of hazardous reactions. The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product. Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Product classified: Acute toxicity (Dermal), Category 4: Harmful in contact with skin. Acute toxicity (Inhalation), Category 4: Harmful if inhaled. Acute toxicity (Oral), Category 4: Harmful if swallowed.

b) skin corrosion/irritation; Based on available data, the classification criteria are not met.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity;

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 7 of 9 Print date: 20/04/2020

Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

Name		Bioaccumulation			
		Log Pow	BCF	NOECs	Level
acetic acid		-0,17	_	_	Very low
CAS No: 64-19-7	EC No: 200-580-7	-0,17	-	-	Very IOW

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 8 of 9 Print date: 20/04/2020

14.1 UN number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description: ADR: Transportation is not dangerous. IMDG: Transportation is not dangerous. ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H226	Flammable	liquid	and	vapour.	
------	-----------	--------	-----	---------	--

- H302 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.
- H412 Harmful to aquatic life with long lasting effects.

Classification codes:

Acute Tox. 4 : Acute toxicity (Dermal), Category 4 Acute Tox. 4 : Acute toxicity (Inhalation), Category 4 Acute Tox. 4 : Acute toxicity (Oral), Category 4 Aquatic Chronic 3 : Chronic effect to the aquatic environment, Category 3 Flam. Liq. 3 : Flammable liquid, Category 3 Skin Corr. 1A : Skin Corrosive, Category 1A

(in accordance with Regulation (EU) 2015/830)

AD-CB-Capture Buffer

Version: 01 Revision date: 20/04/2020



Page 9 of 9 Print date: 20/04/2020

Skin Corr. 1C : Skin Corrosive, Category 1C

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

- BCF: Bioconcentration factor.
- CEN: European Committee for Standardization.
- DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be
- considered a tolerable minimum.
- DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
- EC50: Half maximal effective concentration.
- PPE: Personal protection equipment.
- LC50: Lethal concentration, 50%.
- LD50: Lethal dose, 50%.
- Log Pow: Logarithm of the partition octanol-water.

NOEC: No observed effect concentration.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01 Revision date: 20/04/2020



Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name: Product Code: Elution Buffer AD-EB

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

Purification of PCR products.

Uses advised against: Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01 Revision date: 20/04/2020



Page 2 of 7 Print date: 20/04/2020

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The product does not require special handling measures, the following general measures are recommended:

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01

Revision date: 20/04/2020



Page 3 of 7 Print date: 20/04/2020

Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product at room temperature (18-30°C), in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values. 8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Purification of PCR products.		
Breathing prote	ction:		
If the recommender	ed technical measures are observed, no individual protection equipment is necessary.		
Hand protection	n:		
PPE:	Protective gloves.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride) Breakthrough time > 480 Material thickness (mm): 0,35		
Eye protection:			
If the product is h	andled correctly, no individual protection equipment is necessary.		
Skin protection:			
PPE:	Protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		
PPE:	Work footwear.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN ISO 13287, EN 20347		
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.		
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident		

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01 Revision date: 20/04/2020

BLACKHILLS DIAGNOSTIC RESOURCES

Page 4 of 7 Print date: 20/04/2020

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: N.A./N.A. Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density: N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: N.A./N.A. Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product. Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01 Revision date: 20/04/2020



Page 5 of 7 Print date: 20/04/2020

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard;Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer

Version: 01 Revision date: 20/04/2020



Page 6 of 7 Print date: 20/04/2020

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR:Transportation is not dangerous.IMDG:Transportation is not dangerous.ICAO/IATA:Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

Abbreviations and acronyms used:

CEN: European Committee for Standardization.

PPE: Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

(in accordance with Regulation (EU) 2015/830)

AD-EB-Elution Buffer



Version: 01 Revision date: 20/04/2020 Page 7 of 7 Print date: 20/04/2020

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020



Page 1 of 7 Print date: 20/04/2020

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

1.1 Product identifier.

Product Name: Product Code: Wash Buffer AD-WB

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

Purification of PCR products.

Uses advised against: Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	Blackhills Diagnostic Resources, S.L.U.
Address:	CL. Camino del Pilón 86, Casa 7 Local 50011
City:	Zaragoza
Province:	Zaragoza
Telephone:	(+34) 976 094 603
E-mail:	info@bdrdiagnostics.com
Web:	http://www.bdrdiagnostics.com/

1.4 Emergency telephone number: 112 (EU). Outside Europe, call your local emergency service.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the mixture.

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2 Label elements.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

This mixture does not contain substances that pose a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, are not assigned a Community exposure limit in the workplace, and are not classified as PBT/vPvB or included in the Candidate List.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020



Page 2 of 7 Print date: 20/04/2020

Remove contaminated clothing.

Ingestion.

Keep calm. NEVER induce vomiting.

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

No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks.

Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate decontaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

The product does not require special handling measures, the following general measures are recommended:

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020 BLACKHILLS DIAGNOSTIC RESOURCES

Page 3 of 7 Print date: 20/04/2020

Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store the product at room temperature (18-30°C), in a dry and well-ventilated place. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided. Keep away from oxidising agents and from highly acidic or alkaline materials. Store according to local legislation. Observe indications on the label. The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values. 8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %		
Uses:	Purification of PCR products.		
Breathing prote	ction:		
If the recommender	ed technical measures are observed, no individual protection equipment is necessary.		
Hand protection	n:		
PPE:	Protective gloves.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride) Breakthrough time > 480 Material thickness (mm): 0,35		
Eye protection:			
If the product is h	andled correctly, no individual protection equipment is necessary.		
Skin protection:			
PPE:	Protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		
PPE:	Work footwear.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN ISO 13287, EN 20347		
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.		
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident		

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020



Page 4 of 7 Print date: 20/04/2020

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:Light Colour: Colourless Odour:Odourless Odour threshold:N.A./N.A. pH:N.A./N.A. Melting point:N.A./N.A. Boiling Point: N.A./N.A. Flash point: N.A./N.A. Evaporation rate: N.A./N.A. Inflammability (solid, gas): N.A./N.A. Lower Explosive Limit: N.A./N.A. Upper Explosive Limit: N.A./N.A. Vapour pressure: N.A./N.A. Vapour density:N.A./N.A. Relative density: N.A./N.A. Solubility:N.A./N.A. Liposolubility: N.A./N.A. Hydrosolubility: N.A./N.A. Partition coefficient (n-octanol/water): N.A./N.A. Auto-ignition temperature: N.A./N.A. Decomposition temperature: N.A./N.A. Viscosity: N.A./N.A. Explosive properties: N.A./N.A. Oxidizing properties: N.A./N.A. N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.

Dropping point: N.A./N.A. Blink: N.A./N.A. Kinematic viscosity: N.A./N.A. N.A./N.A.= Not Available/Not Applicable due to the nature of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions until expire date (see section 7). **10.3 Possibility of hazardous reactions.** The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects.

There are no tested data available on the product. Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020



Page 5 of 7 Print date: 20/04/2020

a) acute toxicity; Not conclusive data for classification.

b) skin corrosion/irritation; Not conclusive data for classification.

c) serious eye damage/irritation; Not conclusive data for classification.

d) respiratory or skin sensitisation; Not conclusive data for classification.

e) germ cell mutagenicity; Not conclusive data for classification.

f) carcinogenicity; Not conclusive data for classification.

g) reproductive toxicity; Not conclusive data for classification.

h) STOT-single exposure; Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard;Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer

Version: 01 Revision date: 20/04/2020



Page 6 of 7 Print date: 20/04/2020

SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6. **14.1 UN number.**

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR:Transportation is not dangerous.IMDG:Transportation is not dangerous.ICAO/IATA:Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Not applicable. Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

It is recommended that the product only be employed for the purposes advised.

Abbreviations and acronyms used:

CEN: European Committee for Standardization.

PPE: Personal protection equipment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

(in accordance with Regulation (EU) 2015/830)

AD-WB-Wash Buffer



Version: 01 Revision date: 20/04/2020 Page 7 of 7 Print date: 20/04/2020

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) 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.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.