

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

Product Code	Description
PCR_GAL_ESRI_96	GALEAS™ uPCR: ESRI

Kit Contents

GALEAS™ uPCR: ESRI

Ultrasensitive qPCR ESRI mutation detection kit (32 reactions per multiplex) (PCR_GAL_ESRI_96)

Components	Product Code	Storage Conditions
uPCR Buffer	USP_BUF_96	- 20°C
uPCR ESRI PP mix 1	USP_EPP1_32	- 20°C
uPCR ESRI PP mix 2	USP_EPP2_32	- 20°C
uPCR ESRI PP mix 3	USP_EPP3_32	- 20°C
uPCR ESRI PC1	USP_EPC1_32	- 20°C
uPCR ESRI PC2	USP_EPC2_32	- 20°C
uPCR ESRI PC3	USP_EPC3_32	- 20°C
uPCR NC	USP_ENC_96	- 20°C
uPCR Polymerase	USP_POL_96	- 20°C
uPCR Diluent	USP_DIL_96	- 20°C

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR Buffer**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection / face protection

P337 + P313 – If eye irritation persists: get medical advice / attention

P305 + P351 + P338 – **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR Buffer

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C. Avoid long-term light exposure.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form:	Liquid
Colour:	Undetermined
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Speciic Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL
 Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PP mix 1**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PP mix 1

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required. Dilute with plenty of water.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PP Mix 2**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PP mix 2

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required. Dilute with plenty of water.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

1.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL
 Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PP Mix 3**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:
P264 Wash thoroughly after handling
P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:
None known

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According to Regulation (EC) No 1907/2006 (REACH)

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PP mix 3

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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According to Regulation (EC) No 1907/2006 (REACH)

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C. Avoid long-term light exposure.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PC 1**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements: P264 – Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection / face protection

P337 + P313 If eye irritation persists: get medical advice / attention

P305 + P351 + P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PC 1

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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According to Regulation (EC) No 1907/2006 (REACH)

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C. Avoid long-term light exposure.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Undetermined
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PC 2**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:

H319 - Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PC 2

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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GALEAS™ uPCR: ESRI Version: 1.0

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C. Avoid long-term light exposure.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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GALEAS™ uPCR: ESRI Version: 1.0

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Undetermined
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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Revision date: 09.09.2024

13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR ESRI PC 3**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR ESRI PC 3

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C. Avoid long-term light exposure.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Undetermined
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL
 Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR NC**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:
P264 Wash thoroughly after handling
P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR NC

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

No special hazards.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL
 Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns. Long Term Exposure: No information available
EYE CONTACT:	Short Term Exposure: Corrosive to mucus membranes. Long Term Exposure: No information available
INGESTION:	Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes. Long Term Exposure: No information available
INHALATION:	Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes. Long Term Exposure: No information available
INJECTION:	Short Term Exposure: No information available Long Term Exposure: No information available

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR Polymerase**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

Not a hazardous substance or mixture, classification according to Regulation (EC) No 1272/2008

Hazard pictograms: None

Risk statements: None

Hazard statements: Not a hazardous substance or mixture

Precautionary statements: None

Other hazards: None

3. Composition/information on ingredients

3.1. Substances

uPCR Polymerase

3.2. Mixtures

Description: Mixture of substances which at the given concentration are not considered to be hazardous. This mixture does not contain any substances which are mentioned in section 3.2 of REACH annex II. This mixture contains glycerol at a concentration between 50-70% w/w (CAS: 56-81-5).

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4. First Aid Measures

4.1. Description of first aid measures

General information: No special measures required providing good laboratory practice is followed. Wear protective gloves.

Following skin contact: Wash with plenty of soap and water. If symptoms develop, seek medical advice.

Following eye contact: Rinse opened eye for 15 minutes under running water.

If wearing contact lenses, remove lenses and continue rinsing. Seek medical advice if irritation occurs / persists.

Ingestion: Do not induce vomiting and rinse mouth with water.

Inhalation: Not expected to be an inhalation hazard under anticipated conditions.

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

Treat symptomatically.

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

None expected under anticipated conditions of normal use and when handled following good laboratory practices whilst wearing gloves. See section 4.1 for further information.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contains Glycerol (CAS: 56-81-5).

5.2. Special hazard arising from the substance or mixture:

Hazardous combustion products: carbon oxides.

5.3. Advice for fire-fighters:

Exposure to decomposition products may be a hazard to health.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

Glycerol (CAS: 56-81-5) with control parameters of 10 mg/m³.

Appropriate engineering controls: Adequate ventilation, washing facilities available.

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Undetermined
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous decomposition products formed under fire conditions.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No data available.

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

Components with data:

Glycerol (CAS: 56-81-5):

Acute oral toxicity: LD50 Oral (Rat): 12,000 mg/kg

Acute dermal toxicity: LD50 Dermal (Rabbit): 10,000 mg/kg

May cause skin corrosion/irritation in susceptible persons. Mild skin irritation present in rabbits after 24 hours of exposure. May irritate eyes.

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12. Ecological information

Quantitative data on the toxicity of this product are not available.

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

Components with data:

Glycerol (CAS: 56-81-5):

Toxicity to fish: LC0 (Leuciscus idus (Golden orfe)): > 250 mg/l. Exposure time: 48 h.

13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished

without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

GALEAS™ uPCR: ESRI Version: 1.0

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1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Trade name: **uPCR Diluent**

1.1. Recommended use and restrictions on use

Application: For research use only.

Uses advised against: No specific uses advised against are identified.

1.2. Details of the supplier of the safety data sheet:

Nonacus Ltd

Unit 5 Quinton Business Park

11 Ridgeway, Quinton

Birmingham

B32 1AF

Registered No: 9590278

Lee.silcock@nonacus.com / Chris.sale@nonacus.com

1.3. Emergency telephone numbers:

Lee Silcock: +44(0)7793316851

Chris Sale: +44(0)7949922629

2. Hazards identification

2.1. Classification of the substance or mixture:

This material is considered hazardous according to Regulation (EC) No 1272/2008

2.2. Label elements:



Signal words: Danger

Hazard statements:
H319 Causes serious eye irritation

Precautionary statements:

P264 Wash thoroughly after handling

P280 Wear protective gloves / protective clothing / eye protection/ face protection

P337 + P313 If eye irritation persists: get medical advice /attention

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards:

None known

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3. Composition/information on ingredients

3.1. Substances

uPCR Diluent

3.2. Mixtures

EDTA: 0-5%

CAS number: 56-81-5

Composition components: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First Aid Measures

4.1. Description of first aid measures

Following skin contact: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

Following eye contact: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. If wearing contact lenses, remove lenses and continue rinsing. Seek medical aid.

Ingestion: Call a physician. Do not induce vomiting.

Inhalation: Remove from exposure area to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult give Oxygen.

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

Treat symptomatically.

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

Treat symptomatically.

5. Firefighting measures

Not known to be flammable or combustible

5.1. Extinguishing media

Suitable extinguishing agents: Carbon dioxide, dry chemical extinguishers, foam extinguishers. Water may not be effective but may be used to keep containers exposed to fires cool.

5.2. Special hazard arising from the substance or mixture:

Containers can burst violently or explode when heated extremely, due to excessive pressure build-up. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation. Avoid contact with skin and eyes.

See protective measures under Section 7 and 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Small scale spill: Use inert absorbent material to soak up spill. Clean contaminated areas equipment with plenty of water which can be flushed to drains.

Large scale spill: Use sand/vermiculite/spill booms to bind liquid. Use further inert absorbent material to soak up liquid. Prevent large spill liquids from entering drains.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good chemical hygiene and laboratory safe practices.

Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion.

7.2. Conditions for safe storage, including any incompatibilities

Keep container closed in a dry, cool environment at -20°C.

7.3. Specific end use(s)

Health care and research: product for research use only.

8. Exposure controls/personal protection

8.1. Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Appropriate engineering controls: Adequate ventilation, washing facilities available.

Personal protective equipment: Avoid all unnecessary exposure and apply gloves and lab coat.

Eye/Skin controls: Wear protective gloves and eye protection when handling this product.

Protective glasses are not required if used in a hood. Wear appropriate laboratory compliant attire, such as lab coat. Change gloves if they become contaminated.

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General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Avoid contact with eyes and skin. Do not eat, drink, or smoke when using this product. Wear gloves and wash and dry hands after use.

Respiratory protection: In case of Insufficient ventilation, wear a government approved respirator.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Undetermined
pH value:	Undetermined
Melting point/melting range:	Undetermined
Boiling point/boiling range:	Undetermined
Flash point:	Undetermined
Flammability (solid, gaseous):	Not applicable
Ignition temperature:	Undetermined
Decomposition temperature:	Undetermined
Danger of explosion:	Undetermined

Explosion limits:

Lower:	Undetermined
Upper:	Undetermined
Vapor pressure:	Undetermined
Density:	Undetermined
Relative density:	Undetermined
Vapour density:	Undetermined
Evaporation rate:	Undetermined

Solubility in:

Water:	Undetermined
Partition coefficient (n-octanol/water):	Undetermined
Viscosity:	Undetermined

Other information: No further information available

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10. Stability and reactivity

10.1. Reactivity

No dangerous reactions known under conditions of normal use and following good laboratory practices.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Extremely high or low temperatures. Heat, flames, and sparks.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, strong bases, metals.

10.6. Hazardous decomposition products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours

11. Toxicological Information

11.1. Information on toxicological effects

Quantitative data on the toxicity of this product are not available.

Acute toxicity:	Not classified
Primary irritant effect:	on the skin: No data available, may cause irritation on the eye: No data available, may cause irritation
Sensitization:	No data available
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity:	Not classified
Aspiration Hazard:	Not classified
Signs and Symptoms of Exposure:	No data available
Additional Information:	None

12. Ecological information

Toxicity:	No known significant effects or critical hazards
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Results of PBT & vPvB assessment:	This mixture does not contain any substances that are assessed to be a PBT or a VPvB.
Other adverse effects:	No additional information available.

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13. Disposal considerations

Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be disposed of as unused product.

14. Transport information

Not considered dangerous goods during transportation.

15. Regulatory information

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

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL
 Contains no REACH Annex XIV substances

15.2. Chemical Safety Assessment carried out? No

16. Other Information

Training instructions: Use as instructed.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT:	<p>Short Term Exposure: May be harmful if absorbed through skin – Causes chemical burns.</p> <p>Long Term Exposure: No information available</p>
EYE CONTACT:	<p>Short Term Exposure: Corrosive to mucus membranes.</p> <p>Long Term Exposure: No information available</p>
INGESTION:	<p>Short Term Exposure: Toxic if swallowed. Corrosive to mucus membranes.</p> <p>Long Term Exposure: No information available</p>
INHALATION:	<p>Short Term Exposure: May be toxic if inhaled. Corrosive to mucus membranes.</p> <p>Long Term Exposure: No information available</p>
INJECTION:	<p>Short Term Exposure: No information available</p> <p>Long Term Exposure: No information available</p>

Further information: This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.

Notice to readers: Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.