



DOPlify® Safety Data Sheets

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Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: PCR-grade H₂O

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B, DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: PCR-grade H₂O

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Not classified

Hazard statement:

Not required

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

Precautionary Statements: P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known

Other hazards: None known

Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Colourless.

Odour: Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: No data available.

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.

Product/packaging disposal: Recycle where possible.

Safety Data Sheet (SDS) for PCR-grade H₂O
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code:	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

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 (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: Cell Lysis Enzyme

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B, DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: Extraction of PCR-ready DNA.

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Not classified

Hazard statement:

Not required

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

Precautionary Statements: P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known

Other hazards: None known

Safety Data Sheet (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

Safety Data Sheet (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Safety Data Sheet (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid

Colour: Colourless.

Odour: Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Safety Data Sheet (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.

Product/packaging disposal: Recycle where possible.

Safety Data Sheet (SDS) for Cell Lysis Enzyme

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code:	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

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 (SDS) for Cell Lysis Buffer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: Cell Lysis Buffer

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B, DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: Buffer for thermostable protease.

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Not classified

Hazard statement:

Not required

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

Precautionary Statements: P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known

Other hazards: None known

Safety Data Sheet (SDS) for Cell Lysis Buffer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

Safety Data Sheet (SDS) for Cell Lysis Buffer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Safety Data Sheet (SDS) for Cell Lysis Buffer

According to ISO & SANS 11014:2010 & SANS 10234

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid

Colour: Colourless.

Odour: Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Safety Data Sheet (SDS) for Cell Lysis Buffer
According to ISO & SANS 11014:2010 & SANS 10234

Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: No data available.

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.

Product/packaging disposal: Recycle where possible.

Safety Data Sheet (SDS) for Cell Lysis Buffer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code:	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

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 (SDS) for WGA Polymerase
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: WGA Polymerase

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B, DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: Engineered DNA Polymerase.

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Not classified

Hazard statement:

Not required

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required.

Signal Words: Not required.

Hazard Statements: Not required.

Precautionary Statements: P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known.

Other hazards: None known.

Safety Data Sheet (SDS) for WGA Polymerase
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

Safety Data Sheet (SDS) for WGA Polymerase

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Safety Data Sheet (SDS) for WGA Polymerase

According to ISO & SANS 11014:2010 & SANS 10234

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Colourless.

Odour: Odourless.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Safety Data Sheet (SDS) for WGA Polymerase

According to ISO & SANS 11014:2010 & SANS 10234

Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.

Product/packaging disposal: Recycle where possible.

Safety Data Sheet (SDS) for WGA Polymerase

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code:	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

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 (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: WGA PCR Buffer

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B,
DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: Buffer for whole genome amplification.

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Acute Toxicity, oral (Category 3)

STOT SE (Category 1)

Hazard statement:

H301

H370

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: Toxic if swallowed, causes damage to organs.

Label elements:

Hazard pictograms:



Signal Words: Danger

Safety Data Sheet (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

Hazard Statements: H301 Toxic if swallowed. H370 Causes damage to organs. H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements: P270 Do not eat, drink or smoke when using this product. P264 Wash hands thoroughly after handling. P273 Avoid release to the environment. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P330 Rinse mouth.

Special labelling of certain mixtures: None known.

Other hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS-No.	Concentration % by weight	Classification EC1272/2008
	EC-No.		
Tetramethylammonium chloride	75-57-0	1-10%	Acute Toxicity, oral (Category 2) H300. Acute Toxicity, dermal (Category 3) H311. Skin Irritation (Category 2) H315. STOT SE 1, H370. Aquatic Chronic 2, H411.
	200-880-8		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Toxic if swallowed.

Skin Contact: May be harmful in contact with skin.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

Safety Data Sheet (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

Safety Data Sheet (SDS) for WGA PCR Buffer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Colourless.

Odour: Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (° C): Not known.

Boiling point/range (° C): Not known.

Flash point (° C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (° C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/l) at 20 °C: Not known.

n-Octanol/ Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Safety Data Sheet (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (p Ka): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: Tetramethylammonium chloride

Acute Toxicity oral LD50 for rat 50 mg/kg

Skin corrosion/irritation: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

Safety Data Sheet (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Results of PBT& vPvB assessment: No data available.
Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.
Product/ packaging disposal: Recycle where possible.

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.
Relevant information regarding restrictions: None known.
EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]
Other National regulations: None.
Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.
Relevant classification and H statements (number and full text):
 STOT SE 1 - Specific Target Organ Toxicity Single Exposure (Category 1).
 Aquatic Chronic 2 – Hazardous to the aquatic environment (Chronic Category 2).
 Aquatic Chronic 3 – Hazardous to the aquatic environment (Chronic Category 3).
 H300 Fatal if swallowed. H301 Toxic if swallowed. H311 Toxic in contact with skin. H315 Causes skin irritation. H370 Causes damage to organs. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS) for WGA PCR Buffer

According to ISO & SANS 11014:2010 & SANS 10234

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 (SDS) for Primer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: Primer

Additional information: Part of: PG-Seq Library Preparation Reagents Product Code: RHS5096-I-B, DOPlify Product Code: RHS4050.

Relevant identification uses of the substance and uses advised against:

Identified uses: Primer for PCR amplification.

Uses advised against: Not known.

Details of the supplier of the Safety Data Sheet:

PerkinElmer Health Sciences (Australia) Pty Ltd
Level One, TechInSA Incubator
40-46 West Thebarton Road
Thebarton, South Australia 5031
P.O. Box 61, Hindmarsh, South Australia 5007

Emergency telephone numbers:

+61 (0)8 8152 9380

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:

Not classified

Hazard statement:

Not required

For full text of H-Statements see Section 16.

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

Precautionary Statements: P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known

Other hazards: None known

Safety Data Sheet (SDS) for Primer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients: Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

Ingestion: Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: Sealed containers may rupture when heated.

Advice for fire-fighters: Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

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According to ISO & SANS 11014:2010 & SANS 10234

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

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 information on disposal.

Additional information: None known.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

Specific end uses: Analytical reagent use only as directed.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

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Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Liquid.

Colour: Colourless.

Odour: Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

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Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.

Conditions to avoid: Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not data available.

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: Dispose of in accordance with municipal, provincial and national regulations.

Product/packaging disposal: Recycle where possible.

Safety Data Sheet (SDS) for Primer
According to ISO & SANS 11014:2010 & SANS 10234

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	Not required	Not required	Not required
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code:	Not required	Not required	Not required

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16: OTHER INFORMATION

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

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.