

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: EzQuant ssDNA Buffer
Catalogue number: T00-FPBR01-00 (Buffer)
Brand: Blue-Ray Biotech

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

Identified uses: For research use only. Not used for diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company: Blue-Ray Biotech Corp.
Address: 5F., No. 2, Alley 2, Sih-wei Lane, Jhong-jheng Rd., Sin-dian District, New Taipei City, 23148
Telephone: +886-2-8219-1206
Fax: +886-2-8219-1205
E-mail: sales@blue-raybio.com

1.4 Emergency telephone number

+886-2-8219-1206

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Not applicable.

2.2 GHS Label elements, including precautionary statements

Not applicable.

2.3 Other hazards

Physical and chemical hazards

Eyes: May cause eye irritation in susceptible individuals.

Skin: May cause skin irritation in susceptible individuals.

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Environmental hazards

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

SECTION 3: Composition/information on ingredients**3.1 Substances:**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

3.2 Mixtures:

No data available.

SECTION 4: First aid measures**4.1 Description of first-aid measures**

- a. Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.
- b. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
- c. Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
- d. Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

4.4 Notes to Physician

Not applicable.

SECTION 5: Firefighting measures**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Foam, Carbon dioxide (CO₂), Dry powder.

5.1.2 Unsuitable extinguishing media

No information available.

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment, and emergency procedures**

Always wear recommended Personal Protective Equipment. Use personal protection

equipment.

6.2 Environmental precautions

No special environmental precautions required. See Section 12 for more information.

6.3 Methods and materials for containment and cleaning up

Absorb with inert absorbent material.

6.4 Reference to other sections

See Section 12 for more information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep in properly labeled containers.

7.3 Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls

Personal protective equipment

- a. **Respiratory protection:** In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
- b. **Hand protection:** Wear suitable gloves Glove material: Compatible chemical-resistant gloves.
- c. **Eye protection:** Tight sealing safety goggles.
- d. **Skin and Body Protection:** Wear suitable protective clothing.
- e. **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.
- f. **Environmental exposure controls:** No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

| | |
|---------------------------------------|---------|
| Oduor: | No Data |
| Molecular Weight: | No Data |
| pH: | 6 - 8 |
| Melting point / melting range: | No Data |
| Boiling point / boiling range: | No Data |
| Flash point: | No Data |
| Autoignition Temperature: | No Data |
| Upper explosion limit: | No Data |
| Lower explosion limit: | No Data |
| Vapor Pressure: | No Data |
| Vapor density: | No Data |
| Relative density: | No Data |
| Specific gravity: | No Data |
| Solubility: | No Data |
| Partition coefficient: | No Data |
| Viscosity: | No Data |

9.2 Other information

9.2.1 Information with regard to physical hazard classes

No information available.

9.2.2 Other safety characteristics

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions.

10.3 Conditions to avoid

No information available.

10.4 Incompatible materials

Strong acids. Strong oxidants.

10.5 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no evidence available indicating acute toxicity.

11.2 Principal Routes of Exposure

- a. **Acute toxicity:** Data are conclusive but insufficient for classification.
- b. **Skin corrosion/irritation:** Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.
- c. **Serious eye damage/irritation:** Data are conclusive but insufficient for classification.
- d. **Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.
- e. **STOT – single exposure:** Data are conclusive but insufficient for classification.
- f. **STOT– repeated exposure:** Data are conclusive but insufficient for classification.
- g. **Carcinogenicity:** Data are conclusive but insufficient for classification.
- h. **Germ cell mutagenicity:** Data are conclusive but insufficient for classification.
- i. **Reproductive toxicity:** Data are conclusive but insufficient for classification.
- j. **Aspiration hazard:** Data are conclusive but insufficient for classification.

SECTION 12: Ecological information

12.1 Toxicity

The environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

Inherently biodegradable.

12.3 Bioaccumulative potential

Material does not bioaccumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

14.1 IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number or ID number: Not Applicable

UN proper shipping name: Not Applicable

Transport hazard class(es): Not Applicable

Packing group: Not Applicable

14.2 Environmental hazards: Not Applicable

14.3 Special precautions for user: Not Applicable

14.4 Maritime transport in bulk according to IMO instruments: Not Applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern: None.

Substance subject to authorization per REACH Annex XIV: None.

Restricted substances under EC 1907/2006, Annex XVII: None.

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals): None.

Regulation(EU)No2019/1021(Stockholm Convention–persistent organic pollutants): None.

EU - Substances Depleting the Ozone layer (1005/2009): None.

German Water hazard classes (Wassergefährdungsklassen): Not classified.

Other International Inventories: No information available.

Chemical safety assessment: No Chemical safety assessment has been carried out.

SECTION 16: Other information

a. Indication of changes: GHS aligned.

b. Training instructions: Use as instructed.

c. Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.

d. Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer.

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: EzQuant ssDNA Reagent (200X in DMSO)
Catalogue number: T00-FPBR01-00 (Reagent - 200X in DMSO)
Brand: Blue-Ray Biotech

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

Identified uses: For research use only. Not used for diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company: Blue-Ray Biotech Corp.
Address: 5F., No. 2, Alley 2, Sih-wei Lane, Jhong-jheng Rd., Sin-dian District, New Taipei City, 23148
Telephone: +886-2-8219-1206
Fax: +886-2-8219-1205
E-mail: sales@blue-raybio.com

1.4 Emergency telephone number

+886-2-8219-1206

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Not applicable.

2.2 GHS Label elements, including precautionary statements

Not applicable.

2.3 Other hazards

Physical and chemical hazards

Eyes: May cause eye irritation in susceptible individuals.

Skin: May cause skin irritation in susceptible individuals.

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Environmental hazards

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

SECTION 3: Composition/information on ingredients**3.1 Substances:**

No data available.

3.2 Mixtures:

| | |
|-----------------------|---------------------------|
| Chemical Name: | Dimethyl sulfoxide (DMSO) |
| CAS No.: | 67-68-5 |
| Weight %: | 95-100 % |

SECTION 4: First aid measures**4.1 Description of first-aid measures**

- Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
- Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
- Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

4.4 Notes to Physician

Not applicable.

SECTION 5: Firefighting measures**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Foam, Carbon dioxide (CO₂), Dry powder.

5.1.2 Unsuitable extinguishing media

No information available.

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment, and emergency procedures**

Always wear recommended Personal Protective Equipment. Use personal protection equipment.

6.2 Environmental precautions

No special environmental precautions required. See Section 12 for more information.

6.3 Methods and materials for containment and cleaning up

Absorb with inert absorbent material.

6.4 Reference to other sections

See Section 12 for more information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Always wear recommended Personal Protective Equipment. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep in properly labeled containers.

7.3 Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Exposure Limits**

Contains no substances with occupational exposure limit values.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls**Personal protective equipment**

- a. **Respiratory protection:** In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
- b. **Hand protection:** Wear suitable gloves Glove material: Compatible chemical-resistant gloves.
- c. **Eye protection:** Tight sealing safety goggles.
- d. **Skin and Body Protection:** Wear suitable protective clothing.
- e. **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.
- f. **Environmental exposure controls:** No special environmental precautions required.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| | |
|---------------------------------------|---------------------------------|
| Appearance: | liquid |
| Oduor: | No Data |
| Molecular Weight: | No Data |
| pH: | 6 - 8 |
| Melting point / melting range: | 18 – 19 °C (64.4 - 66.2 °F) |
| Boiling point / boiling range: | 188 - 190 °C (370 – 374 °F) |
| Flash point: | 87 – 89 °C (188.6 - 192.2 °F) |
| Autoignition Temperature: | 214 – 216 °C (417.2 – 420.8 °F) |
| Upper explosion limit: | 61 – 64 % |
| Lower explosion limit: | 2.4 – 2.8 % |
| Vapor Pressure: | No Data |
| Vapor density: | No Data |
| Relative density: | No Data |
| Specific gravity: | No Data |
| Solubility: | No Data |
| Partition coefficient: | No Data |
| Viscosity: | No Data |

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

No information available.

9.2.2 Other safety characteristics

No information available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

None known

10.2 Chemical stability

Stable under normal conditions.

10.3 Conditions to avoid

No information available.

10.4 Incompatible materials

Strong acids. Strong oxidants.

10.5 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

| | |
|-------------------------|---------------------------|
| Chemical Name: | Dimethyl sulfoxide (DMSO) |
| Oral LD50: | 14500 mg/kg Oral LD50 |
| Dermal LD50: | >40000 mg/kg bw |
| Inhalation LC50: | >5000 mg/l |

11.2 Principal Routes of Exposure

- a. **Acute toxicity:** Data are conclusive but insufficient for classification.
- b. **Skin corrosion/irritation:** Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.
- c. **Serious eye damage/irritation:** Data are conclusive but insufficient for classification.
- d. **Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.
- e. **STOT – single exposure:** Data are conclusive but insufficient for classification.
- f. **STOT– repeated exposure:** Data are conclusive but insufficient for classification.
- g. **Carcinogenicity:** Data are conclusive but insufficient for classification.
- h. **Germ cell mutagenicity:** Data are conclusive but insufficient for classification.
- i. **Reproductive toxicity:** Data are conclusive but insufficient for classification.
- j. **Aspiration hazard:** Data are conclusive but insufficient for classification.

SECTION 12: Ecological information**12.1 Toxicity**

| | |
|---|---------------------------|
| Chemical Name: | Dimethyl sulfoxide (DMSO) |
| Toxicity to algae: | No data available. |
| Toxicity to daphnia and other aquatic invertebrates: | No data available. |
| Toxicity to fish: | No data available. |
| Microtox Data: | No data available. |
| log Pow | ~2.03 |

12.2 Persistence and degradability

Inherently biodegradable.

12.3 Bioaccumulative potential

Material does not bioaccumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

14.1 IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number or ID number: Not Applicable

UN proper shipping name: Not Applicable

Transport hazard class(es): Not Applicable

Packing group: Not Applicable

14.2 Environmental hazards: Not Applicable

14.3 Special precautions for user: Not Applicable

14.4 Maritime transport in bulk according to IMO instruments: Not Applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern: None.

Substance subject to authorization per REACH Annex XIV: None.

Restricted substances under EC 1907/2006, Annex XVII:

| | |
|--------------------------------------|------------------------------|
| Chemical Name: | Dimethyl sulfoxide (DMSO) |
| Weight %: | 95 – 100 % |
| EU - REACH (1907/2006) - Annex XVII: | Use restricted. See item 75. |

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals): None.

Regulation(EU)No2019/1021(Stockholm Convention–persistent organic pollutants): None.

EU - Substances Depleting the Ozone layer (1005/2009):

German Water hazard classes (Wassergefährdungsklassen): Not classified.

| | |
|---------------------------|--|
| Chemical Name: | Dimethyl sulfoxide (DMSO) |
| Weight %: | 95 – 100 % |
| Water hazard class (WGK): | hazard class 1 - slightly hazardous to water |

Other International Inventories: No information available.

Chemical safety assessment: No Chemical safety assessment has been carried out.

SECTION 16: Other information

a. Indication of changes: GHS aligned.

b. Training instructions: Use as instructed.

c. Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.

d. Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer.

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: EzQuant ssDNA Standard #1 (0 ng/μl in TE Buffer)
Catalogue number: T00-FPBR01-00 (Standard #1)
Brand: Blue-Ray Biotech

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

Identified uses: For research use only. Not used for diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company: Blue-Ray Biotech Corp.
Address: 5F., No. 2, Alley 2, Sih-wei Lane, Jhong-jheng Rd., Sin-dian District, New Taipei City, 23148
Telephone: +886-2-8219-1206
Fax: +886-2-8219-1205
E-mail: sales@blue-raybio.com

1.4 Emergency telephone number

+886-2-8219-1206

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Not applicable.

2.2 GHS Label elements, including precautionary statements

Not applicable.

2.3 Other hazards

Physical and chemical hazards

Eyes: May cause eye irritation in susceptible individuals.

Skin: May cause skin irritation in susceptible individuals.

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Environmental hazards

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

SECTION 3: Composition/information on ingredients**3.1 Substances:**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

3.2 Mixtures:

No data available.

SECTION 4: First aid measures**4.1 Description of first-aid measures**

- a. Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.
- b. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
- c. Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
- d. Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

4.4 Notes to Physician

Not applicable.

SECTION 5: Firefighting measures**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Foam, Carbon dioxide (CO₂), Dry powder.

5.1.2 Unsuitable extinguishing media

No information available.

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment, and emergency procedures**

Always wear recommended Personal Protective Equipment. Use personal protection

equipment.

6.2 Environmental precautions

No special environmental precautions required. See Section 12 for more information.

6.3 Methods and materials for containment and cleaning up

Absorb with inert absorbent material.

6.4 Reference to other sections

See Section 12 for more information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep in properly labeled containers.

7.3 Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls

Personal protective equipment

- a. **Respiratory protection:** In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
- b. **Hand protection:** Wear suitable gloves Glove material: Compatible chemical-resistant gloves.
- c. **Eye protection:** Tight sealing safety goggles.
- d. **Skin and Body Protection:** Wear suitable protective clothing.
- e. **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.
- f. **Environmental exposure controls:** No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

| | |
|---------------------------------------|---------|
| Oduor: | No Data |
| Molecular Weight: | No Data |
| pH: | 6 - 8 |
| Melting point / melting range: | No Data |
| Boiling point / boiling range: | No Data |
| Flash point: | No Data |
| Autoignition Temperature: | No Data |
| Upper explosion limit: | No Data |
| Lower explosion limit: | No Data |
| Vapor Pressure: | No Data |
| Vapor density: | No Data |
| Relative density: | No Data |
| Specific gravity: | No Data |
| Solubility: | No Data |
| Partition coefficient: | No Data |
| Viscosity: | No Data |

9.2 Other information

9.2.1 Information with regard to physical hazard classes

No information available.

9.2.2 Other safety characteristics

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions.

10.3 Conditions to avoid

No information available.

10.4 Incompatible materials

Strong acids. Strong oxidants.

10.5 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no evidence available indicating acute toxicity.

11.2 Principal Routes of Exposure

- a. **Acute toxicity:** Data are conclusive but insufficient for classification.
- b. **Skin corrosion/irritation:** Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.
- c. **Serious eye damage/irritation:** Data are conclusive but insufficient for classification.
- d. **Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.
- e. **STOT – single exposure:** Data are conclusive but insufficient for classification.
- f. **STOT– repeated exposure:** Data are conclusive but insufficient for classification.
- g. **Carcinogenicity:** Data are conclusive but insufficient for classification.
- h. **Germ cell mutagenicity:** Data are conclusive but insufficient for classification.
- i. **Reproductive toxicity:** Data are conclusive but insufficient for classification.
- j. **Aspiration hazard:** Data are conclusive but insufficient for classification.

SECTION 12: Ecological information

12.1 Toxicity

The environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

Inherently biodegradable.

12.3 Bioaccumulative potential

Material does not bioaccumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

14.1 IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number or ID number: Not Applicable

UN proper shipping name: Not Applicable

Transport hazard class(es): Not Applicable

Packing group: Not Applicable

14.2 Environmental hazards: Not Applicable

14.3 Special precautions for user: Not Applicable

14.4 Maritime transport in bulk according to IMO instruments: Not Applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern: None.

Substance subject to authorization per REACH Annex XIV: None.

Restricted substances under EC 1907/2006, Annex XVII: None.

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals): None.

Regulation(EU)No2019/1021(Stockholm Convention–persistent organic pollutants): None.

EU - Substances Depleting the Ozone layer (1005/2009): None.

German Water hazard classes (Wassergefährdungsklassen): Not classified.

Other International Inventories: No information available.

Chemical safety assessment: No Chemical safety assessment has been carried out.

SECTION 16: Other information

a. Indication of changes: GHS aligned.

b. Training instructions: Use as instructed.

c. Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.

d. Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer.

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: EzQuant ssDNA Standard #2 (20 ng/μl in TE Buffer)
Catalogue number: T00-FPBR01-00 (Standard #2)
Brand: Blue-Ray Biotech

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

Identified uses: For research use only. Not used for diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company: Blue-Ray Biotech Corp.
Address: 5F., No. 2, Alley 2, Sih-wei Lane, Jhong-jheng Rd., Sin-dian District, New Taipei City, 23148
Telephone: +886-2-8219-1206
Fax: +886-2-8219-1205
E-mail: sales@blue-raybio.com

1.4 Emergency telephone number

+886-2-8219-1206

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Not applicable.

2.2 GHS Label elements, including precautionary statements

Not applicable.

2.3 Other hazards

Physical and chemical hazards

Eyes: May cause eye irritation in susceptible individuals.

Skin: May cause skin irritation in susceptible individuals.

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

Environmental hazards

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

SECTION 3: Composition/information on ingredients**3.1 Substances:**

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

3.2 Mixtures:

No data available.

SECTION 4: First aid measures**4.1 Description of first-aid measures**

- a. Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.
- b. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
- c. Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
- d. Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

4.4 Notes to Physician

Not applicable.

SECTION 5: Firefighting measures**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Foam, Carbon dioxide (CO₂), Dry powder.

5.1.2 Unsuitable extinguishing media

No information available.

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment, and emergency procedures**

Always wear recommended Personal Protective Equipment. Use personal protection

equipment.

6.2 Environmental precautions

No special environmental precautions required. See Section 12 for more information.

6.3 Methods and materials for containment and cleaning up

Absorb with inert absorbent material.

6.4 Reference to other sections

See Section 12 for more information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool, and well-ventilated place. Keep in properly labeled containers.

7.3 Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values.

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

8.2 Exposure controls

Personal protective equipment

- a. **Respiratory protection:** In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
- b. **Hand protection:** Wear suitable gloves Glove material: Compatible chemical-resistant gloves.
- c. **Eye protection:** Tight sealing safety goggles.
- d. **Skin and Body Protection:** Wear suitable protective clothing.
- e. **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.
- f. **Environmental exposure controls:** No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

| | |
|---------------------------------------|---------|
| Oduor: | No Data |
| Molecular Weight: | No Data |
| pH: | 6 - 8 |
| Melting point / melting range: | No Data |
| Boiling point / boiling range: | No Data |
| Flash point: | No Data |
| Autoignition Temperature: | No Data |
| Upper explosion limit: | No Data |
| Lower explosion limit: | No Data |
| Vapor Pressure: | No Data |
| Vapor density: | No Data |
| Relative density: | No Data |
| Specific gravity: | No Data |
| Solubility: | No Data |
| Partition coefficient: | No Data |
| Viscosity: | No Data |

9.2 Other information

9.2.1 Information with regard to physical hazard classes

No information available.

9.2.2 Other safety characteristics

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known

10.2 Chemical stability

Stable under normal conditions.

10.3 Conditions to avoid

No information available.

10.4 Incompatible materials

Strong acids. Strong oxidants.

10.5 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There is no evidence available indicating acute toxicity.

11.2 Principal Routes of Exposure

- a. **Acute toxicity:** Data are conclusive but insufficient for classification.
- b. **Skin corrosion/irritation:** Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.
- c. **Serious eye damage/irritation:** Data are conclusive but insufficient for classification.
- d. **Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.
- e. **STOT – single exposure:** Data are conclusive but insufficient for classification.
- f. **STOT– repeated exposure:** Data are conclusive but insufficient for classification.
- g. **Carcinogenicity:** Data are conclusive but insufficient for classification.
- h. **Germ cell mutagenicity:** Data are conclusive but insufficient for classification.
- i. **Reproductive toxicity:** Data are conclusive but insufficient for classification.
- j. **Aspiration hazard:** Data are conclusive but insufficient for classification.

SECTION 12: Ecological information

12.1 Toxicity

The environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

Inherently biodegradable.

12.3 Bioaccumulative potential

Material does not bioaccumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

14.1 IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

UN number or ID number: Not Applicable

UN proper shipping name: Not Applicable

Transport hazard class(es): Not Applicable

Packing group: Not Applicable

14.2 Environmental hazards: Not Applicable

14.3 Special precautions for user: Not Applicable

14.4 Maritime transport in bulk according to IMO instruments: Not Applicable.

SECTION 15: Regulatory information

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

Substances of Very High Concern: None.

Substance subject to authorization per REACH Annex XIV: None.

Restricted substances under EC 1907/2006, Annex XVII: None.

Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals): None.

Regulation(EU)No2019/1021(Stockholm Convention–persistent organic pollutants): None.

EU - Substances Depleting the Ozone layer (1005/2009): None.

German Water hazard classes (Wassergefährdungsklassen): Not classified.

Other International Inventories: No information available.

Chemical safety assessment: No Chemical safety assessment has been carried out.

SECTION 16: Other information

a. Indication of changes: GHS aligned.

b. Training instructions: Use as instructed.

c. Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.

d. Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer.

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.