# Safety Data Sheet

**SECTION 1: CHEMICAL IDENTIFICATION**

| | |
|---|---|
| Kit No.: | AQ-60013 |
| Product No.: | AQ-90030: Q-Bright® Endure Substrate Solution |
| Name: | Q-Bright® Endure Chemiluminescent Detection Kit |
| Recommended Use: | For Research Use Only |
| Manufacturer: | Quanta BioDesign, Ltd.<br>7500 Montgomery Drive<br>Plain City, OH 43064 |
| Telephone/Fax: | (614) 792-2958 / (614) 760-9781 |
| Emergency Telephone Number: | (614) 286-3702 |

**SECTION 2: HAZARDS INDENTIFICATION**

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

GHS Classification of the substance or mixture: This mixture is not classified as hazardous according to GHS.

GHS label elements, including precautionary and hazard statements: This mixture is not classified as hazardous according to GHS.

Hazards not otherwise classified: None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**SECTION 4: FIRST-AID MEASURES**

General Advice: Consult a physician. Show this Safety Data Sheet to the doctor in attendance.

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if symptoms occur. If symptoms persist, consult a physician.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Skin contact: Causes skin irritation.

Eye contact: Causes eye irritation

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

**SECTION 5: FIRE-FIGHTING MEASURES**

Extinguishing media:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE**

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters:

Occupational exposure limits: No data.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:

Physical state @ 4°C: Liquid
Color: clear to amber
Odor: Not available.
Odor threshold pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Burning time: Not available.
Burning rate: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.

Solubility: Soluble in water or aqueous buffers
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
SADT: Not available.
Viscosity: Not available.

**SECTION 10: STABILITY AND REACTIVITY**

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

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No specific data.
Incompatible materials: No specific data.

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

**SECTION 11: TOXICOLOGICAL INFORMAITON**

Information on toxicology effects:
Acute toxicity: Not data available
Irritation/Corrosion: No data available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Not available
Aspiration hazard: Not available.

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly investigated.

**SECTION 12: ECOLOGICAL INFORMATION**

Toxicity: Not available
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available
Other adverse effects: No known significant effects or critical hazards.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal methods:
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: TRANSPORT INFORMATION**

Land Transport (ADR/RID): Not a dangerous good in the sense of this transport regulation.
Inland Water ways transport (ADN): Not a dangerous good in sense of this transport regulation.
Sea Transport (IMDG): Not a dangerous good in sense of this transport regulation.
Air Transport (ICAQ-TP/IATA-DGR): Not a dangerous good in sense of this transport regulation.
DOT Classification: Not a DOT controlled material (United States).

**SECTION 15: REGULATORY INFORMATION**

US Federal Regulations
This mixture is not listed on the TSCA Inventory.
This mixture is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed
SARA 302/304:
Composition/information on ingredients: No products were found.
SARA 304 RQ: Not applicable.
SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found.
State regulations:
California Prop65: Not listed

International regulations:
EU regulatory information
Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information
Safety Data Sheet accord to Regulation (EC) No. 1907/2006 (REACH)

**SECTION 16: OTHER INFORMATION**

The customer is responsible for determining the PPE code for this material.

History

Date of issue 3/8/2021 Date of revision 03/21/2023

Prepared by: Regulatory Specialist

Key to abbreviations:

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References: Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Quanta BioDesign, Ltd.
7500 Montgomery Drive
Plain City, OH 43064
Telephone: 614-792-2958

# Safety Data Sheet

**SECTION 1: CHEMICAL IDENTIFICATION**

| | |
|---|---|
| Kit No.: | AQ-60013 |
| Product No.: | AQ-90029: Q-Bright® Stable Peroxide |
| Name: | Q-Bright® Endure Chemiluminescent Detection Kit |
| Recommended Use: | For Research Use Only |
| Manufacturer: | Quanta BioDesign, Ltd.<br>7500 Montgomery Drive<br>Plain City, Ohio 43064 |
| Telephone / Fax: | 614-792-2958 / 614-760-9781 |
| Emergency Telephone Number: | 614-286-3702 |

**SECTION 2: HAZARDS INDENTIFICATION**

OSHA/HCS status: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

GHS Classification of the substance or mixture: This mixture is not classified as hazardous according to GHS.

GHS label elements, including precautionary and hazard statements: This mixture is not classified as hazardous according to GHS.

Hazards not otherwise classified: None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**SECTION 4: FIRST-AID MEASURES**

Description of necessary first aid measures

Eye contact: F lush eyes with plenty of water.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Wash off with soap and plenty of water.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No specific data available

Inhalation: No specific data available

Skin contact: No specific data available

Ingestion: No specific data available

Over-exposure signs/symptoms

Eye contact: No specific data available

Inhalation: No specific data available

Skin contact: No specific data available

Ingestion: No specific data available

Indication of immediate medical attention and special treatment needed

No specific data available

See toxicological information (Section 11).

**SECTION 5: FIRE-FIGHTING MEASURES**

Extinguishing media:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: None known

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of vial in a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible,

absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE**

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters:

Occupational exposure limits: Contains no substances with occupational exposure limits.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:

Physical state @ 4°C: Solution
Color: clear to amber
Odor: Not available.
Odor threshold pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Burning time: Not applicable.
Burning rate: Not applicable
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.
Solubility: Soluble in water or aqueous buffers.
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
SADT: Not available.
Viscosity: Not available.

**SECTION 10: STABILITY AND REACTIVITY**

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

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous

reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: No specific data.

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

**SECTION 11: TOXICOLOGICAL INFORMAITON**

Information on toxicology effects:

Acute toxicity: Not available
Irritation/Corrosion: Not available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Not available.
Aspiration hazard: Not available.

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

**SECTION 12: ECOLOGICAL INFORMATION**

Toxicity: Not available.
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available
Soil/water partition coefficient (KOC): Not available.
Other adverse effects: No known significant effects or critical hazards.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: TRANSPORT INFORMATION**

Land Transport (ADR/RID): Not a dangerous good in the sense of this transport regulation.

Inland Water ways transport (ADN): Not a dangerous good in sense of this transport regulation.

Sea Transport (IMDG): Not a dangerous good in sense of this transport regulation.

Air Transport (ICAQ-TP/IATA-DGR): Not a dangerous good in sense of this transport regulation.

DOT Classification: Not a DOT controlled material (United States).

**SECTION 15: REGULATORY INFORMATION**

US Federal Regulations

TSCA Inventory: Not Listed
This substance is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed
SARA 302/304:
Composition/information on ingredients: No products were found.
SARA 304 RQ: Not applicable.
SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found.
State regulations:
California Prop65: Not listed

International regulations:

EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

Safety Data Sheet accord to Regulation (EC) No. 1907/2006 (REACH)

**SECTION 16: OTHER INFORMATION**

The customer is responsible for determining the PPE code for this material.

History

Date of issue 3/8/2021 Date of revision 03/21/2023
Prepared by: Regulatory Specialist
Key to abbreviations:
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References:  Not available.

Notice to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Quanta BioDesign, Ltd.
7500 Montgomery Drive
Plain City, OH 43064
Telephone:  614-792-2958