



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

Product Name:	BrightQuant™ R - Reagent
Product Number:	HLXBQ-R-10mL, HLXBQ-R-1mL, HLXBQ-R-250uL, HLXBQ-EE-R-1kb, HLXBQ-R-Kit
Brand:	Helix Biotech, Inc.
Company Address:	Helix Biotech, Inc. 1460 Breda Drive Knoxville, TN 37918
Technical Phone:	1-800-491-1701
Emergency Phone:	1-800-491-1701
Email Inquiries:	info@helix-biotech.com
Email Orders:	sales@helix-biotech.com
Visit us On the Web:	www.helixbiotech.com

2. HAZARDS IDENTIFICATION

GHS Classification

Signal Word

WARNING

Hazard pictograms

None

Health hazards

Not Hazardous

Physical hazards

GHS Physical Hazard	Flammable liquids
GHS Physical Hazard/Category 4	Category 4

Environmental hazards

Not Hazardous

Hazard Statements

H227 - Combustible liquid



Precautionary Statements

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

Response

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction Storage P403 - Store in a well-ventilated place

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable

HMIS

Health	1
Flammability	2
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Common Name	EC No	Weight- %
dimethyl sulfoxide	67-68-5	Not applicable	200-664-3	85-95

We recommend handling all chemicals with caution.

4. FIRST AID MEASURES

Description of first-aid measures

Skin contact

Rinse skin with water. Immediate medical attention is not required.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician

Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H227 - Combustible liquid

Indication of any immediate medical attention and special treatment needed

Wear protective gloves/protective clothing and eye/face protection

5. FIREFIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media- Water spray. Carbon dioxide (CO₂). Foam. Drychemical.

Unsuitable extinguishing media- No information available.

Special hazards arising from the substance or mixture

No data

Advice for firefighters

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES



Personal precautions, protective equipment and emergency procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area)

Use personal protection equipment

See section 8 for more information

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information

7. HANDLING AND STORAGE

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

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

Specific end use(s)

For research use only

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
dimethylsulfoxide	None	None	None	None



Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
dimethylsulfoxide	None	None	None

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection

Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. Eye protection Tight sealing safety goggles.

Skin and Body Protection

Wear suitable protective clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Information on basic physical and chemical properties

- A. Physical state liquid
- B. Color No data
- C. Odor No data
- D. Molecular Weight No data



- E. Melting point / melting range °C 18 - 19, °F 64.4 - 66.2
- F. Boiling point / boiling range °C 188 - 190, °F 370 - 374
- G. Flammability (solid, gas) No data
- H. Lower explosion limit 2.4% - 2.8%
- I. Upper explosion limit 61% - 64%
- J. Flash point °C 87 - 89, °F 188.6 - 192.2
- K. Autoignition Temperature °C 214 - 216, °F 417.2 - 420.8
- L. Decomposition temperature °C No data, °F No data
- M. pH No data
- N. Evaporation rate No data
- O. Viscosity No data
- P. Solubility No data
- Q. Partition coefficient:
- R. n-octanol/water
- S. No data
- T. Vapor Pressure No data
- U. Specific gravity No data
- V. Relative density No data
- W. Vapor density No data
- X. Explosive properties No data
- Y. Oxidizing properties No data
- Z. Particle characteristics No data

Other information

Information with regard to physical hazard classes

No information available

Other safety characteristics

No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity

None known.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to avoid

No information available.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

No data available.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
dimethylsulfoxide	14500 mg/kg Oral LD50	>40000 mg/kg bw	>5000 mg/l

Principal Routes of Exposure

Acute toxicity

Data are conclusive but insufficient for classification.

Skin corrosion/irritation

Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.

Serious eye damage/irritation

Data are conclusive but insufficient for classification

Respiratory or skin sensitization

Data are conclusive but insufficient for classification

Specific target organ toxicity (STOT)–single exposure

Data are conclusive but insufficient for classification

Specific target organ toxicity (STOT)–repeated exposure

Data are conclusive but insufficient for classification

Carcinogenicity

Data are conclusive but insufficient for classification

Germ cell mutagenicity

Data are conclusive but insufficient for classification

Reproductive toxicity

Data are conclusive but insufficient for classification

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.

Chemical Name	Toxicity to Algae	Toxicity to daphnia and other aquatic invertebrate	Toxicity to Fish	Microtox Data	Log Pow

		s			
dimethylsulf oxide	No data available	No data available	No data available	No data available	logPow-1.35

Mobility in soil

No information available.

Persistence and degradability

Inherently biodegradable.

Bioaccumulative potential

Material does not bioaccumulate.

Results of PBT and vPvB assessment

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

Other adverse effects

No information available.

Section 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal

technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

14. TRANSPORT INFORMATION

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

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Maritime transport in bulk according to IMO instruments

Not Applicable

Section 15. REGULATORY INFORMATION

Component	US TSCA
ethylsulfoxide 67-68-5 (85-95)	Listed

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations

Chemical Name	Massachusetts - RTK (Right-to-Know)	New Jersey - RTK (Right-to-Know)	Pennsylvania - RTK
dimethylsulfoxide		Listed	

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

B3 - Combustible liquid

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations(CPR)and the SDS contains all the information required by the CPR.

National Regulations - Brazil

Chemical Name	CAS No	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
dimethylsulfoxide	67-68-5	Not Listed	Not Listed

Section 16. OTHER INFORMATION

For research use only. Not for use in diagnostic procedures.

References

- ECHA:<http://echa.europa.eu/>
- TOXNET:<http://toxnet.nlm.nih.gov/>
- eChemPortal:<http://www.echemportal.org/>
- LOLIdatabase:<https://www.chemadvisor.com/loli-database>

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