Safety Data Sheet

This Safety Data Sheeet (SDS) complies with Regulation (EC) No 1907/2006 (REACH), OSHA's Hazard Communication Standard (29 CFR 1910.1200), and Canadian Hazardous Products Regulations (SOR/ 2022-272).

Section 1: Identification

1.1. Product Identifier

Trade name: MRE Gel Pad

1.2. Recommended use and restrictions on use:

Recommended use: For use with Quality Electrodynamics MRE devices as described in the user manual.

1.3. Manufacturer:

Quality Electrodynamics LLC
6655 Beta Drive Suite 100
Mayfield Village, Ohio 44143
+1-440-638-5106
info@qualedyn.com

1.4. Emergency Phone Number:

+1-440-638-5106

Section 2: Hazards identification

2.1. Classification of the substance or mixture:

The product is not classified as hazardous according to U.S. OSHA 29 CFR 1910.1200, Regulation (EC) No 1272/2008 (CLP), or Canadian Hazardous Products Regulations (SOR/ 2022-272).

2.2. Label elements

Labelling according to U.S. OSHA 29 CFR 1910.1200 and Regulation (EC) No 1272/2008 (CLP Canadian Hazardous Products Regulations (SOR/ 2022-272): Not applicable

Hazard pictograms and Signal Words: Not applicable

Hazard-determining components for labelling: Not applicable

Hazard statements: Not applicable

Precautionary statements: Not applicable

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

Section 3: Composition/Information on Ingredients

3.1. Mixtures

Description: Mixture of the substances listed below with non-hazardous additions.

Composition:

Identifiers	***Substance Name***	***Concentration (w/w%)***
CAS: 7732-18-5 EC #: 231-791-2	Water	64.995-83.0%
CAS: 56-81-5 EC #: 200-289-5	Glycerol Substance with a Community workplace exposure limit	15.0-30.0%
CAS: 9004-32-4	Carboxymethylcellulose Sodium	2.0-5.0%

Note: All substances listed above not classified as hazardous according to U.S. OSHA 29 CFR 1910.1200, Regulation (EC) No 1272/2008 (CLP), or Canadian Hazardous Products Regulations (SOR/2015-17).

Section 4: First aid measures

4.1. Description of first aid measures

After inhalation: Remove exposed individual to fresh air.

After skin contact: Remove contaminated clothing and shoes. Wash skin with soap and water and rinse thoroughly.

After eye contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Remove contact lenses.

After ingestion: Rinse out mouth with water. Drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by medical personnel.

Personal protective equipment for first aid responder: Rubber gloves, safety goggles

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

No further relevant information available.

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

No further relevant information available.

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, dry powder

Unsuitable extinguishing media: None

5.2. Special hazards arising from the substance or mixture: Combustion of vapor and liquid may produce carbon monoxide, carbon dioxide, and other hazardous gases.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency and emergency personnel:

Wear personal protective equipment. Avoid contact with eyes or skin. Keep unprotected persons away.

Remove ignition sources. Provide sufficient ventilation.

6.2. **Environmental precautions:**

Do not allow liquid to enter drains.

6.3. Methods and material for containment and clean up

Absorb with inert liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to item 13.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

Section 7: Handling and Storage

7.1. Precautions for safe handling:

Protective measures:

Handle in a well-ventilated area.

Wear suitable protective equipment.

Avoid contact with skin and eyes.

Avoid inhalation of vapors.

Measures to prevent fire:

Keep away from sparks, open flames, heat, and direct sunlight.

Take precautionary measures against static discharges.

Measures to prevent aerosol and dust generation:

Not applicable

Measures to protect the environment:

Not applicable

Advice on general occupational hygiene: Refer to Section 8.

7.2. Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Further information about storage conditions:

Store in cool, dry conditions in well-sealed receptacles.

7.3. Specific end use(s)

No further relevant information available.

Section 8: Exposure Controls/Personal Protection

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:

Glycerol (CAS: 56-81-5, EC #: 200-289-5)	
MAK (Germany)	Long-term value: 200E mg/m^3 vgl.Abschn.Xc
VME (France)	Long-term value: 10 mg/m^3
WEL (Great Britain)	Long-term value: 10 mg/m^3

DNELs: Data not available

PNECs: Data not available

Additional information: Based on data available at the time of writing.

8.2. Exposure controls

Based on composition shown in Section 3, the following measures are suggested for occupational safety measure:

8.2.1. Appropriate engineering controls:

See Section 7 for information about design of technical facilities.

8.2.2 Personal protective equipment:

Respiratory protection: Suitable respiratory protective device recommended if exposure limits are exceeded or if irritation or other symptoms are experienced.

Skin Protection: Protective gloves and clothing

Eye protection: Tightly fitting safety goggles.

Environmental exposure controls: Ensure adequate ventilation. Ensure eyewash stations and safety shower are located near the workstation.

Section 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State	Gel
Color	Transparent
Odor	Odorless
Odor Threshold	Data not available
pH	Data not available
Melting point/freezing point	Data not available
Initial boiling point/boiling range	Data not available
Flash point	Data not available
Flammability (solid, gas)	Not applicable
Auto-Ignition temperature	Data not available
Decomposition temperature	Data not available
Self-igniting	Product is not self-igniting
Explosive properties	Product does not present an explosion hazard.
Upper/lower flammability or explosive limits	Data not available
Vapour pressure	Data not available
Vapour density	Data not available
Evaporation rate	Data not available
Relative density	Data not available
Solubility in / Miscibility with water	Data not available
Partition coefficient (n-octanol/water)	Data not available
Viscosity:	
Dynamic	Data not available
Kinematic	Data not available

9.2. Other information

No further relevant information available

Section 10: Stability and Reactivity

10.1. **Reactivity:** No decomposition if used according to specification.

10.2. **Chemical stability:** Stable under recommended storage conditions.

10.3. **Possibility of hazardous reactions:** No dangerous reactions known.

10.4. **Conditions to avoid:** Melts and decomposes when strongly heated.

10.5. **Incompatible materials:** Strong base, strong acid.

10.6. **Hazardous decomposition products:** Carbon monoxide.

Section 11: Toxicological Information

11.1. Information on toxicological effects

Acute Toxicity: Based on available data, classification criteria are not met.

LD/LC50 values relevant for classification:

9004-32-4 Carboxymethylcellulose Sodium		
Oral	*LD50*	>27000 mg/kg (mouse) 27000 mg/kg (rat) >27000 mg/kg (rabbit)
Dermal	*LD50*	*>2000 mg/kg (rabbit)*
56-81-5 Glycerol		
Oral	*LD50*	4090 mg/kg (mouse) 12600 mg/kg (rat) 27000 mg/kg (rabbit)
Dermal	*LD50*	>10000 mg/kg (rabbit)

Skin corrosion/irritation: Based on available data, classification criteria are not met.

Serious eye damage/irritation: Based on available data, classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, classification criteria are not met.

Germ cell mutagenicity: Based on available data, classification criteria are not met.

Carcinogenicity: Based on available data, classification criteria are not met.

Reproductive toxicity: Based on available data, classification criteria are not met.

STOT-single exposure: Based on available data, classification criteria are not met.

STOT-repeated exposure: Based on available data, classification criteria are not met.

Aspiration hazard: Based on available data, classification criteria are not met.

Section 12: Ecological Information

12.1. Toxicity: No further relevant information available.

12.2. Persistence and degradability: No further relevant information available.

12.3. Bioaccumulative potential: No further relevant information available.

12.4. Mobility in soil: No further relevant information available.

12.5. Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6. Endocrine disrupting properties: No further relevant information available.

12.7. Other adverse effects: No further relevant information available.

12.8. Additional information:

Water hazard class 1 (German regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations

13.1. Waste treatment methods

Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information

14.1. UN-Number

ADR, RID, ADN, IMDG, IATA: Not applicable

14.2. UN proper shipping name

ADR, RID, ADN, IMDG, IATA: Not applicable

14.3. Transport hazard class(es)

ADR, RID, ADN, IMDG, IATA: Not applicable

14.4. Packing group

ADR, RID, ADN, IMDG, IATA: Not applicable

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user: Not applicable

14.7. Maritime transport in bulk according to IMO instruments

MARPOL, IBC Code, IMDG Code: Not applicable.

Section 15: Regulatory Information

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

U.S. Federal Regulations

US TSCA

All components of this product are listed on the US TSCA (Toxic Substances Control Act) inventory.

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act, Clean Water Act

Data not available

OSHA

The product is not classified as hazardous according to U.S. OSHA 29 CFR 1910.1200.

Canada

This material does not contain any chemical components that meet the criteria under subsection 73(1) of the Canadian Environmental Protection Act, 1999 (CEPA). All chemical components are on the Domestic Substances List (DSL).

European Union

SVHC Candidate List of REACH Regulation Annex XIV Authorization

None of the ingredients are listed.

REACH Regulation Annex XVII Restriction

None of the ingredients are listed.

REACH Regulation Annex XIV Authorization List

None of the ingredients are listed.

MAK (German Maximum Workplace Concentration)

None of the ingredients are listed.

15.2. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

Section 16: Other information

This SDS was prepared in accordance with Regulation (EC) No 1907/2006 (REACH), OSHA's Hazard Communication Standard (29 CFR 1910.1200), Canadian Hazardous Products Regulations (SOR/ 2022-272), and the requirements of the U.S. Department of Labor Occupational Safety and Health Administration.

Disclaimer:

The information in this SDS has been compiled, in good faith, from technical data sources believed to be reliable. The SDS is intended to disclose potential hazards of working with the material in an occupational setting. Information presented in the SDS is believed to be accurate and represents the best information currently available. However, the information is provided without any warranty, expressed or implied, regarding its accuracy. Quality Electrodynamics assumes no liability resulting from the use of such products, data, or information. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage, and disposal f the material, and must be familiar with and follow generally accepted safe handling procedures. Quality Electrodynamics reserves the right to update the SDS periodically as new information becomes available. It is the responsibility of the user to verify that they have the latest revision available.

Abbreviations and Acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative