

Safety Data Sheet

Issue Date: 07-Sep-2021

Revision Date: 29-July-2025

Version 4

1. IDENTIFICATION

Product identifier

Product Name EarthTec™ QZ

Other means of identification

SDS # ESL-011-CA

PMRA PCP Registration No. 35299

UN/ID No UN3082

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use.

Details of the supplier of the safety data sheet

Initial supplier identifier

Univar Solutions Canada Ltd.
64 Arrow Road
North York, ON M9M2L9

Manufacturer Address

Earth Science Laboratories, Inc.
903 N 47th Street, Suite 105
Rogers, AR 72756
earthsciencelabs.com

Emergency Telephone

Initial supplier phone number +1 416-740-5300
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

| | |
|-----------------|------------|
| Skin irritation | Category 2 |
| Eye irritation | Category 2 |

Signal Word

Warning

Hazard statements

Causes skin irritation
Causes eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

IF ON SKIN (or hair): Wash with plenty of water. Specific treatment can be found in Section 4 - First Aid Measures of the SDS. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Other Information

Hazardous to the aquatic environment, acute hazard Category 1 and Hazardous to the aquatic environment, long-term hazard Category 2.

3. COMPOSITION /INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

| Chemical name | CAS No. | Weight-% | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|-----------------------------|-----------|----------|--|---|
| Copper sulfate pentahydrate | 7758-99-8 | 10-30* | - | - |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this Safety Data Sheet to the doctor in attendance.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhalation Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms May be harmful if swallowed. Causes skin irritation. Causes eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to Physicians Treat symptomatically

5. FIRE FIGHTING MEASURES

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Specific hazards arising from the chemical | May react with high carbon metals to produce hydrogen gas, which can form an explosive mixture. |
| Explosion Data | |
| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|--|
| Personal precautions | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. |
| Other Information | Refer to protective measures listed in sections 7 and 8. |

Environmental precautions

| | |
|----------------------------------|---|
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |
|----------------------------------|---|

Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. Flush with water into a retaining area or container. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |
| Prevention of secondary hazards | Neutralize solution with bicarbonate of soda. Pick up and transfer to properly labeled containers. |

7. HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on Safe Handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| Storage Conditions | Store the product in its original shipping container or a container made from plastic polymers. After opening, reseal any unused product in its original, airtight container. Keep the product in a safe, secure location, away from pets and out of the reach of children. Keep it locked up. Store the product away from excessive heat. Always store the product above 32°F (0°C). Do not freeze the product. Freezing can cause it to separate. Avoid contact with galvanized pipes and nylon storage or handling equipment. |
| Incompatible Materials | Strong bases. Strong reducing agents. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | Liquid |
| Color | Blue |
| Odor | Minimal |
| Melting point / freezing point | Not determined |
| Boiling point / boiling range | 220° F |
| Flammability (Solid, Gas) | Not applicable – Liquid |
| Lower and upper explosion limit or lower and upper flammability limit | Not determined |
| Flash point | Not determined |
| Auto-ignition temperature | Not determined |
| Decomposition temperature | Not determined |
| pH | 0.2 – 0.3 |
| Kinematic viscosity | Not determined |
| Solubility – Water / Other solvents | Completely soluble / Not determined |
| Partition Coefficient – n-octanol/water (logarithmic value) | Not determined |
| Vapor pressure | 0.1 mm 68° F (Air = 1) |
| Density and relative density | Density: 1.165 – 1.185 g/kg / Rel. density 1.181 g/kg |
| Relative vapor pressure | Not determined |
| Particle characteristics | Not determined |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | Not reactive under normal conditions. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Hazardous Polymerization | Will not occur. |
| Conditions to Avoid | None known based on information supplied. |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products | Sulfur dioxide. Sulfur trioxide. |

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Eye contact | OPPTS Guideline 870.2400 - Acute Eye Irritation Test was performed on this product which concluded that ocular administration produced irritation which cleared within 14 days resulting in a Category 2 classification. Irritating to eyes. |
| Skin contact | Causes skin irritation. OPPTS GUIDELINE 870.2500 - Acute Dermal Irritation Test was performed on this product which concluded that a 4-hr semi-occluded conditions to rabbits resulted in slight dermal irritation in five of six test animals. This test material was classified as Toxic Category III for dermal irritation. Regardless, a Category 2 classification was deemed appropriate. |
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Symptoms related to the physical, chemical and toxicological characteristics

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|-----------------|---|
| Symptoms | Redness. May cause redness and tearing of the eyes. |
|-----------------|---|

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

| | |
|------------------------|-----------|
| ATEmix (oral) | 2,298.90 |
| ATEmix (dermal) | 36,781.60 |

| | |
|-------------------------------|---------------------------|
| Unknown acute toxicity | No information available. |
|-------------------------------|---------------------------|

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|---------------------|---------------------|------------------------|
| Copper sulfate pentahydrate 7758-99-8 | = 472 mg/kg (Rat) | > 8 g/kg (Rabbit) | > 2.95 mg/L (Rat) |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|------------------------|--|
| Skin irritation | Causes skin irritation. OPPTS GUIDELINE 870.2500 - Acute Dermal Irritation Test was performed on this product which concluded that a 4-hr semi-occluded conditions to rabbits resulted in slight dermal irritation in five of six test animals. This test material was classified in Toxic Category III for dermal irritation. Regardless, a Category 2 classification was deemed appropriate. |
| Eye irritation | Causes eye irritation. OPPTS Guideline 870.2400 - Acute Eye Irritation Test was performed on this product which concluded that ocular administration produced irritation which cleared within 14 days resulting in a Category 2 classification. |
| Carcinogenicity | Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |

12. ECOLOGICAL INFORMATION

Marine Pollutant This material ships as a marine pollutant when single container exceeds 119 gal/ 882 lbs.

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|--|----------------------|---|---|
| Copper sulfate pentahydrate 7758-99-8 | | <i>Oncorhynchus mykiss</i> : Duration, 96 h; LC ₅₀ , 0.09 - 0.19 mg/L; Test Type, Static <i>Oncorhynchus mykiss</i> : Duration, 96 h; LC ₅₀ , 0.1478 - 0.165 mg/L; Test Type, Flow-through <i>Lepomis macrochirus</i> : Duration, 96 h; LC ₅₀ , 0.66 - 1.15 mg/L; Test Type, Semi-static <i>Lepomis macrochirus</i> : Duration, 96 h; LC ₅₀ , 0.96 - 1.8 mg/L; Test Type, Static <i>Pimephales promelas</i> : Duration, 96 h; LC ₅₀ , 0.6752 mg/L; Test Type, Static | <i>Daphnia magna</i> : Duration, 48 h; LC ₅₀ , 0.147 - 0.227 mg/L; Test Type, Static |

| | |
|----------------------------------|---------------------------|
| Persistence/Degradability | No information available. |
| Bioaccumulation | No information available. |
| Other adverse effects | No information available. |

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

| | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated Packaging | Do not reuse empty containers. |

14. TRANSPORT INFORMATION

Note: Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

| | |
|-----------------------------------|---|
| UN/ID No | UN3082 |
| Proper Shipping Name | Environmentally hazardous substance, liquid, n.o.s. (Cupric Sulfate) |
| Transport hazard class(es) | 9 |
| Packing Group | III |
| Reportable Quantity (RQ) | Cupric sulfate (10 lbs) |
| Marine Pollutant | This material ships as a marine pollutant when single container exceeds 119 gal/ 882 lbs. |

TDG

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Cupric Sulfate)
Transport hazard class(es) 9
Packing Group III

MEX

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Cupric Sulfate)
Transport hazard class(es) 9
Packing Group III

IATA

UN number or ID number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Cupric Sulfate)
Transport hazard class(es) 9
Packing group III
Description This material ships as a marine pollutant when inner packagings exceed 5L/5KG

IMDG

UN number or ID number UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Cupric Sulfate)
Transport hazard class(es) 9
Packing Group III
Marine Pollutant This material ships as a marine pollutant when inner packagings exceed 5L/5KG

15. REGULATORY INFORMATION

REGULATORY INFORMATION**International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

| Chemical name | TSCA | DSL/NDSL | EINECS/ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-----------------------------|------|----------|---------------|------|-------|------|-------|------|
| Copper sulfate pentahydrate | X | | | X | X | | X | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| NFPA | Health Hazards 2 | Flammability 0 | Instability 0 | Special Hazards - |
| HMIS | Health Hazards 2 | Flammability 0 | Physical hazards 1 | Personal Protection X |

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | |
|----------------|----------------------------------|
| TWA | TWA (time-weighted average) |
| STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value |
| * | Skin designation |

| | |
|-----------------------|------------------------------|
| Revision Date: | 29-July-2025 |
| Revision Note: | Comprehensive Review Updates |

Section 7

Maximum Use Limit (MUL) associated with NSF certification is 19 mg/L, which does not supersede the product label.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet