

# SAFETY DATA SHEET

Date Printed: 09/22/2024 Date Revised: 01/15/2022

#### **SECTION 1. IDENTIFICATION**

Product Identifier: (4N) 99.99% Tellurium Microleaf

Product Code: TE-E-04-ML

CAS Number: 13494-80-9

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: +1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 GHS06 Skull and crossbones Acute Tox. 3 H301 Toxic if swallowed. GHS07 Acute Tox. 4 H332 Harmful if inhaled. Hazards not otherwise classified No data available Label elements Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labeled according to the CLP regulation. Hazard pictograms



GHS06 Signal word: Danger Hazard statements H301 Toxic if swallowed. H332 Harmful if inhaled.

Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P321 Specific treatment (see on this label). P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification D1A - Very toxic material causing immediate and serious toxic effects Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammability = 0Physical Hazard = 0Other hazards Results of PBT and vPvB assessment PBT: N/A vPvB: N/A

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances CAS No. / Substance Name: 13494-80-9 Tellurium Identification number(s): EC number: 236-813-4

## **SECTION 4. FIRST AID MEASURES**

Description of first aid measures General information Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration. If inhaled: Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm. Seek immediate medical advice. In case of skin contact: Immediately wash with soap and water; rinse thoroughly. Seek immediate medical advice. In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician. If swallowed: Do not induce vomiting; immediately call for medical help. Information for doctor Most important symptoms and effects, both acute and delayed No data available Indication of any immediate medical attention and special treatment needed

#### **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media Suitable extinguishing agents Special powder for metal fires. Do not use water. For safety reasons unsuitable extinguishing agents Water Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Metal oxide fume Hydrogen telluride Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without official permits. Do not allow product to enter drains, sewage systems, or other water courses. Do not allow material to penetrate the ground or soil. Methods and materials for containment and cleanup: Dispose of contaminated material as waste according to section 13. Prevention of secondary hazards: No special measures required. Reference to other sections See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

#### **SECTION 7. HANDLING AND STORAGE**

#### Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

No data available

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility: Do not store together with acids. Store away from strong bases. Reacts with certain metals. Store away from halogens. Do not store with interhalogens. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Specific end use(s) No data available

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: 13494-80-9 Tellurium (100.0%) PEL (USA) Long-term value: 0.1 mg/m<sup>3</sup> as Te REL (USA) Long-term value: 0.1 mg/m<sup>3</sup> as Te TLV (USA) Long-term value: 0.1 mg/m<sup>3</sup> as Te EL (Canada) Long-term value: 0.1 mg/m<sup>3</sup> EV (Canada) Long-term value: 0.1 mg/m<sup>3</sup> as tellurium Additional information: No data Exposure controls Personal protective equipment Follow typical protective and hygienic practices for handling chemicals. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Inspect gloves prior to use. Suitability of gloves should be determined both by material and quality, the latter of which may vary by manufacturer. Penetration time of glove material (in minutes) No data available Eye protection: Safety glasses Body protection: Protective work clothing.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties Appearance: Form: Solid in various forms Color: Silvery-white Odor: Odorless Odor threshold: No data available. pH: N/A Melting point/Melting range: 449.5 °C (841 °F) Boiling point/Boiling range: 989.8 °C (1814 °F) Sublimation temperature / start: No data available Flammability (solid, gas) No data available. Ignition temperature: No data available Decomposition temperature: No data available Autoignition: No data available. Danger of explosion: No data available. **Explosion limits:** Lower: No data available Upper: No data available Vapor pressure: N/A Density at 20 °C (68 °F): 6.24 g/cm<sup>3</sup> (52.073 lbs/gal) Relative density No data available. Vapor density N/A Evaporation rate N/A Solubility in Water (H<sub>2</sub>O): Insoluble Partition coefficient (n-octanol/water): No data available. Viscosity: Dynamic: N/A Kinematic: N/A Other information No data available

## SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with certain metals. Conditions to avoid No data available Incompatible materials: Acids Bases Halogens Interhalogens Oxidizing agents Hazardous decomposition products: Metal oxide fume Hydrogen telluride

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: Toxic if swallowed. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product. LD/LC50 values that are relevant for classification: Oral LD50 83 mg/kg (rat) Inhalative LC50/4H >2420 mg/m3/4H (rat) Skin irritation or corrosion: No irritant effect. Eve irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP. OSHA or ACGIH. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive and/or mutation data for components in this product.

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity Aquatic toxicity: No data available Persistence and degradability No data available **Bioaccumulative potential** No data available Mobility in soil No data available Additional ecological information: Do not allow material to be released to the environment without official permits. Do not allow undiluted product or large quantities to reach groundwater, water courses, or sewage systems. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: N/A vPvB: N/A Other adverse effects No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods Recommendation Consult official regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

#### **SECTION 14. TRANSPORT INFORMATION**

**UN-Number** DOT, ADN, IMDG, IATA N/A UN proper shipping name DOT, ADN, IMDG, IATA N/A Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class N/A Packing group DOT, IMDG, IATA N/A Environmental hazards: N/A Special precautions for user N/A Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A Transport/Additional information: DOT Marine Pollutant (DOT):

## SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. All components of this product are listed on the Canadian Domestic Substances List (DSL). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. **REACH - Pre-registered substances** Substance is listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.