

SAFETY DATA SHEET

Date Printed: 05/11/2024 Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: >95% Zirconium Methacrylate

Product Code: ZR-MACRYL-01-P

CAS Number: 67893-01-0

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 (GHS-US) Eye Irrit. 2A H319 Label elements GHS-US labeling Hazard pictograms (GHS-US)



Signal word: Warning Hazard statements (GHS-US): H319 -Causes serious eye irritation Precautionary statements (GHS-US): P280 -Wear protective gloves/protective clothing/eye protection/face protection P264 -Wash hands thoroughly after handling P305+P351+P338 -IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 -If eye irritation persists: Get medical advice/attention Other hazards Other hazards not contributing to the classification: Material may form zirconium oxides or zirconate polymers on the skin, eyes or in the lungs. Prolonged exposure to zirconium compounds can induce formation of granulomatous lesions in the lungs or on the skin. Unknown acute toxicity (GHS US) No data available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance type: Mono-constituent Name: ZIRCONIUM METHACRYLATE, 95% CAS No: 67893-01-0 EC no: 267-604-6

SECTION 4. FIRST AID MEASURES

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. First-aid measures If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice. First-aid measures In case of skin contact: Wash with plenty of soap and water. First-aid measures In case of eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get medical advice/attention. Most important symptoms and effects, both acute and delayed Symptoms/injuries If inhaled: May cause irritation to the respiratory tract. Symptoms/injuries In case of skin contact: May cause skin irritation. Symptoms/injuries In case of eye contact: Causes serious eye irritation. Symptoms/injuries after ingestion: No data available. Indication of any immediate medical attention and special treatment needed No additional information available

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:

Water spray. Foam. Carbon dioxide. Dry chemical.

Special hazards arising from the substance or mixture

Fire hazard:

Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Advice for firefighters

Firefighting instructions:

Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire. Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6. ACCIDENTAL RELEASE MEASURES

For non-emergency personnel Emergency procedures: Evacuate unnecessary personnel. For emergency responders Protective equipment: Equip cleanup crew with proper protection. Environmental precautions Prevent entry to sewers and public waters. Methods and material for containment and cleaning up Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Reference to other sections See Heading 8. Exposure controls and personal protection.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Do not breathe dust. Provide local exhaust or general room ventilation to minimize exposure to dust. Avoid dust formation.

Hygiene measures:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. W ash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities conditions:

Keep container tightly closed.

Incompatible materials:

W ater

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters No additional information available Exposure controls Appropriate engineering controls: Provide local exhaust or general room ventilation. Personal protective equipment: Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Hand protection: Neoprene or nitrile rubber gloves. Eye protection: Chemical goggles. Contact lenses should not be worn. Skin and body protection: Wear suitable protective clothing. Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid Appearance: Solid. Molecular mass: 431.55 g/mol Color: Off-white. Odor: No data available Odor threshold: No data available Refractive index : No data available pH: No data available Relative evaporation rate (butyl acetate=1): No data available Melting point: 225 -230 °C decomposes Freezing point: No data available Boiling point: No data available Flash point: > 110 °C Auto-ignition temperature: No data available Decomposition temperature: No data available Flammability (solid, gas): No data available Vapor pressure: No data available Relative vapor density at 20 °C: No data available Relative density: No data available VOC content: < 5 % Solubility: Insoluble in water. Reacts with water. Organic solvent: isopropanol, THF Log Pow: No data available Log Kow: No data available Viscosity, Kinematic: No data available Viscosity, Dynamic: No data available Explosive properties: No data available Oxidizing properties: No data available Explosion limits: No data available Other information No additional information available

SECTION 10. STABILITY AND REACTIVITY

Reactivity No additional information available Chemical stability Stable. Possibility of hazardous reactions Material decomposes slowly in contact with water. Conditions to avoid Heat. Open flame. Sparks. Incompatible materials Water.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: Not classified Skin corrosion/irritation: Not classified Serious eye damage/irritation: Causes serious eye irritation. Respiratory or skin sensitization: Not classified Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified Aspiration hazard: Not classified Symptoms/injuries If inhaled: May cause irritation to the respiratory tract. Symptoms/injuries In case of skin contact: May cause skin irritation. Symptoms/injuries In case of eye contact: Causes serious eye irritation. Symptoms/injuries after ingestion: No data available. Reason for classification: Expert judgment

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No additional information available Persistence and degradability No additional information available Bioaccumulative potential No additional information available Mobility in soil No additional information available Other adverse effects Effect on ozone layer: No additional information available Effect on the global warming: No known ecological damage caused by this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods Waste disposal recommendations: Dispose of solid materials or residues at a licensed site. Dispose in a safe manner in accordance with local/national regulations. Ecology -waste materials: Avoid release to the environment.

SECTION 14. TRANSPORT INFORMATION

UN number Not regulated for transport. UN proper shipping name N/A Additional information Other information: No supplementary information available. Transport by sea No additional information available Air transport No additional information available

SECTION 15. REGULATORY INFORMATION

US Federal regulations Zirconium methacrylate (67893-01-0) Listed on the United States TSCA (Toxic Substances Control Act) inventory International regulations Zirconium methacrylate (67893-01-0) Listed on the Canadian NDSL (Non-Domestic Substances List) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) **US State regulations** ZIRCONIUM METHACRYLATE, 95%(67893-01-0) U.S. -California -Proposition 65-Carcinogens List No U.S. -California -Proposition 65-Developmental Toxicity No U.S. -California -Proposition 65-Reproductive Toxicity -Female No U.S. -California - Proposition 65 - Reproductive Toxicity - Male No Zirconium methacrylate (67893-01-0) U.S. -California -Proposition 65-Carcinogens List No U.S. -California -Proposition 65-Developmental Toxicity No U.S. -California -Proposition 65 -Reproductive Toxicity -Female No U.S. -California -Proposition 65 -Reproductive Toxicity -Male No No significance risk level (NSRL)

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 **GRENCED ELEMENTS** UNSUMPORTER FOR SAFERE QUES SAFERED TERNOR NUSE COPYRIA. TEL. 310-208-0551 | FAX 310-208-0351 | customerservice@americanelements.com