

SAFETY DATA SHEET

PRODUCT NAME: Activated Alumina

PRODUCT SYNONYM(s): Aluminum oxide CAS NUMBER: 1344-28-1 RECOMMENDED USE: Adsorbent, fluid filtration SUPPLIER/MANUFACTURER'S NAME: SUMMIT RESEARCH ADDRESS: 103 WHISPERING PINES DR. SUITE A, SCOTTS VALLEY, CA 95066 BUSINESS PHONE: +1 (831) 226-2948 EMERGENCY PHONE: 24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC: CCN832309 (800) 424-9300

DATE OF PREPARATION: August 3, 2020

Classification of the mixture

This product does not meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 and WHMIS 2015.

Component(s) Contributing to Classification(s) None Applicable GHS Label elements, including precautionary statements

Pictogram(s):

None Applicable Signal Word:

None Applicable GHS Hazard

Classification(s): Not Classified

Hazard Statement(s): None Applicable

Prevention Statement(s): None

Applicable Response Statement(s):

None Applicable Storage Statement(s):

None Applicable Disposal

Statement(s): None Applicable Other

Hazards

None applicable.

Summit
Research
Only the best

HAZARDOUS INGREDIENTS: CAS # WT % GHS CLASSIFICATION Aluminum Oxide 1344-28-1 90-100 NOT CLASSIFIED

Additional Information: See SECTION 16 for full classification phrases.

Description of first aid measures Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual. EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

Page 1 of 5

SAFETY DATA SHEET

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use. INHALATION: If breathing becomes difficult, remove victim to fresh air. If

necessary, use artificial respiration to support

vital functions. Seek medical attention. **INGESTION:** If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional. Most important symptoms and effects, both acute and delayed

Dust may cause mechanical eye irritation. Medical conditions aggravated by exposure:

This material or its emissions may aggravate pre-existing disorders involving any target organs mentioned in this Safety Data Sheet as being at risk. Indication of immediate medical attention and special treatment needed

Treat symptoms and reduce over-exposure.

Extinguishing media

Water, Dry powder / dry sand, alcohol-resistant foam, dry chemical or CO₂.

Specific hazards arising from the chemical

None known. Explosion Sensitivity to Mechanical Impact: Not Sensitive. Explosion Sensitivity to Static Discharge: Not Sensitive. Minimum Ignition Energy (M.I.E.) No Data at this time Special firefighting Procedure

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

Small Spill:

Sweep or vacuum material. Transfer to secondary container to be properly disposed. Large

Spill:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Dike area of spill to prevent spreading. Pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Notify proper authorities that a spill has occurred. Environmental precautions

Do not let product enter drains, do not allow to sewers/surface or ground water. See Section 12, Ecological information. Methods and material for containment and cleaning up

Pick up released product with appropriate implements & return to original container if reusable, or dispose. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

General Procedures:

Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs. Handling:

Avoid dust formation. Provide sufficient air exchange and/or exhaust in work rooms. In case of insufficient ventilation, wear suitable respiratory equipment. For personal protection see section 8. Handle and open container with care. If you require advice on safe handling techniques or specific uses, please contact your supplier or check the further information referred to in section 16. Storage:

Keep only in the original container. Keep containers tightly closed in a cool, well-ventilated place.

Adsorbent, fluid filtration.

Control parameters EXPOSURE
LIMITS/GUIDELINES:

Chemical Name CAS# ACGIH OSHA

Aluminum Oxide 1344-28-1 Not Listed Not Listed

Exposure Controls Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place. VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details. RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states. EYE PROTECTION: Safety glasses are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate

Canadian Standards. HAND PROTECTION: Use protective gloves as appropriate to minimize skin contact. If necessary, refer to U.S. OSHA

29 CFR 1910.138 or appropriate Standards of Canada. BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

Information on basic physical and chemical properties

PHYSICAL STATE: Solid ODOR: Not Available ODOR THRESHOLD (PPM):
Not Available APPEARANCE / COLOR: White solid pH: Not Available
MELTING / FREEZING POINT (F°): Not Applicable BOILING POINT (F°):
Not Applicable FLASH POINT (F°): Not Applicable EVAPORATION RATE
($n_{BuAc} = 1$): Not Applicable FLAMMABILITY (solid, gas): Not Applicable
FLAMMABLE LIMITS (in air by volume, %): Not Applicable VAPOR
PRESSURE (mmHg): Not Applicable VAPOR DENSITY (AIR=1): Not
Applicable RELATIVE DENSITY Not Available SOLUBILITY IN WATER (%)
Insoluble PARTITION COEFFICIENT: N-OCTANOL/WATER: Not Applicable
AUTOIGNITION TEMPERATURE: Not Applicable DECOMPOSITION
TEMPERATURE: Not Applicable VISCOSITY: Not Applicable EXPLOSIVE
PROPERTIES: Not Applicable OXIDISING PROPERTIES: Not Applicable

Page 3 of 5

SAFETY DATA SHEET

Other Information

SPECIFIC GRAVITY 4°C: (Water = 1) Not Available DENSITY: Not Available
VOC: Not Applicable WEIGHT PER GALLON: Not Applicable

Reactivity: No data is available. Chemical Stability: Product is stable under recommended storage conditions. Possibility of Hazardous Reactions: No data available. Conditions to avoid: No data available. Incompatible materials: Strong acids, strong oxidizing agents. Hazardous Decomposition Products: No data available.

Information on Toxicological Effects

TOXICITY DATA: No specific data available for this product. POTENTIAL HEALTH HAZARDS OR RISKS FROM EXPOSURE: IRRITANCY OF PRODUCT: Exposure with this product can be irritating to exposed eyes. SENSITIZATION OF PRODUCT: This product is not considered a skin sensitizer. CARCINOGENICITY: Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies. GERM CELL MUTAGENICITY INFORMATION: This product does not contain components which are documented as

Germ Cell Mutagenicity hazards. REPRODUCTIVE TOXICITY INFORMATION: This product does not contain components which are documented as

reproductive hazards. SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: No specific data available for this product. SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: No specific data available for this product. ASPIRATION HAZARD This product is not anticipated to be an aspiration hazard.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION. Toxicity

No specific data available on this product. Persistence and degradability

No specific data available on this product. Bioaccumulative potential

No specific data available on this product. Mobility in soil

No specific data available on this product. Results of PBT and vPvB assessment

No specific data available on this product. Other adverse effects

No specific data available on this product.

PRODUCT DISPOSAL: Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

COMMENTS: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional/local authority requirements.

US DOT/IMDG/IATA:

PROPER SHIPPING NAME: Not Regulated HAZARD CLASS NUMBER and DESCRIPTION: N/A UN IDENTIFICATION NUMBER: N/A PACKING GROUP: N/A DOT LABEL(S) REQUIRED: N/A NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2016): N/A MARINE POLLUTANT: Ingredients are not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

Safety, health and environmental regulations/legislation specific for the substance or mixture UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act. TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals. SARA 311/312:

Acute Health: No Chronic Health: No Fire: No Reactivity: No U.S. CERCLA REPORTABLE QUANTITY (RQ):

CERCLA Reportable Quantity RQ: None

CLEAN WATER ACT:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. STATE REGULATIONS: None. CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain chemicals on the Prop 65

list. CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists. CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is categorized as per WHMIS 2015 Hazardous Product Regulations.

HMIS RATING NFPA RATING 0

0

Page 5 of 5

PHYSICAL HAZARD 0

0

PERSONAL PROTECTION X

-

Caution: HMIS and NFPA ratings are based on a 0-4 rating scale 0= Hazard, 1= Slight, 2= Moderate, 3= High, 4= Extreme

-

0

0

0