40 S. Linden Street, Duquesne, PA 15110 USA

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MATERIAL SAFETY DATA SHEET COMPLIES WITH 29 CFR 1910.1200. OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 05-18-07

CHEMICAL IDENTITY

ZINC OXIDE ALUMINUM OXIDE

Weight %: 98% Weight %: 2%

CAS No.: 1314-13-2 CAS No.: 1344-28-1

Index No.: NA Index No.: NA

ACGIH/TLV: 10 mg/m³ ACGIH/TLV: 10 mg/m³ OSHA/PEL: 15 mg/m³ OSHA/PEL: 10 mg/m³

(Harmful by inhalation) (Harmful by inhalation)

(Irritating to respiratory system)

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR

Beige powder/target, odorless

BOILING POINT
DENSITY (gm/cc)
VAPOR PRESSURE @ 20°
% VOLATILE BY VOLUME (%)
REACTION WITH WATER
EVAPORATION RATE (H20=1)
NA

SOLUBILITY IN WATER Insoluble

MELTING POINT N/A

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT N/A
AUTOIGNITION TEMPERATURE (° C)
NA

FLAMMABILITY NA

SPECIAL FIRE FIGHTING PROCEDURES

Use the fire fighting measures that suit the

surrounding fire. Do not use water or carbon

dioxide as extinguishing agent.

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HEALTH HAZARD INFORMATION

INHALATION: May cause fever, cough, and increase in white blood cell counts. Breathing of dust may aggravate asthma and inflammatory or fibrotic pulmonary disease. This applies to liquids also, due to the drying of solution or slurry creating airborne dust.

EYE: May cause irritation, experienced as redness of the conjunctiva. Liquids can also cause irritation due to dryingof solution or slurry, creating airborne dust.

SKIN: May cause irritation and irritate an existing dermatitis.

ABSORPTION: May show evidence of irritation.

SWALLOWING: May cause nausea.

CARCINOGENICITY: na NTP: na IARC MONOGRAPHS: na OSHA REGULATE: na

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Give at least 2 glasses of milk or water. Induce vomiting unless patient is

unconscious. Call a physician

INHALATION: Remove to fresh air and give artificial respiration if not breathing.

SKIN CONTACT: Wash thoroughly with soap and water EYE CONTACT: Flush thoroughly with plenty of water

REACTIVITY DATA

Airborne dust particles, especially metal dust, and accumulation of such should be treated as explosives. To minimize danger from dust explosions, adequate ventilation should be provided.

Decomposition will not occur if used and stored according to specifications. Avoid acids, water/moisture.

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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear protective clothing to protect against hazards such as overexposure to skin, eyes, and respiratory tract. Collect all material which may be released, into containers, label, and hold for proper disposal per local, state, and federal regulations.

WASTE DISPOSAL METHOD:

Consult federal, state and local regulations for proper disposal procedure.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION If there is dustiness, wear a respirator

selected by OSHA standards.

exposure limits

HAND PROTECTION Gloves recommended

EYE PROTECTION Splash goggles, safety glasses, or face

shields recommended.

BODY PROTECTION

An apron, or other impermeable body

protection suggested. Wash any contaminated clothing before reuse.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: Local dust pickup recommended for open flowing powdered products. Wear personal protective equipment to protect health if TLV is exceeded while handling product. Store material in a dry location with adequate support for the weight of the product. Use caution when lifting product cartons not to strain your back muscles. Store material away from ignition sources which could catch packaging materials on fire.

TRANSPORTATION REQUIREMENTS DOT CLASS: NA

UN NUMBER: NA
IMCO CLASS: NA
OTHER: NA

PRECAUTIONARY LABELING NONE

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE ND= NO

ND= NO DATA FOUND

NR=NOT RECORDED