



Dry Tech Aerogels (Pty) Ltd

The right coating for ultimate insulation.

Aerogel Products and Integrated Service Provider Leader in Energy Conservation and Environmental Protection Innovative Technology

Elementum Insulation Paints and Wood coating SDS.

SAFETY DATA SHEET

(Product codes, AER010 to AER017)

NAP = Not Applicable

NAV = Not Available

SECTION I - IDENTIFICATION OF THE PRODUCT AND THE COMPANY: PRODUCT NAME:

ELEMENTUM PRODUCT CODES AER010 to AER017): Global Harmonized System #3209.10.000

CHEMICAL TYPE: Water based coating MANUFACTURER: DRY TECH AEROGELS (PTY) LTD, SOUTH

AFRICAN PRODUCT USE: Aerogel insulation coating to create thermal barrier on substrates

EMERGENCY TEL NUMBER (016) 931 1640.

SECTION II - HAZARD IDENTIFICATION: This product is water-based and not classified as dangerous for supply or conveyance. The ingredients are water-reducible. This product has been analysed for use in and around food manufacturing and found to be safe for use on non-contact surfaces. Neither toxics nor toxic off-gassing are present.

SECTION III - HAZARD INGREDIENTS: Hazardous Ingredients % CAS/PIN LD-50 (species/route) LC50 (species) texanol 0.5 25265-77-4 3200 mg/kg (oral, rat) NAV mica/additives 14.0 12001-26-2 NAV waterborne polyurethane 10.0 58043-05-3 NAV

SECTION IV - FIRST AID MEASURES: **EYES:** Flush with water for at least 15 minutes; consult physician if irritation continues. **INGESTION:** Do not induce vomiting. Drink 1-2 glasses milk/water. Seek medical attention according to amount of product ingested. **SKIN:** Wash with mild soap and water. **INHALATION:** Remove to fresh air.

SECTION V - FIRE FIGHTING MEASURES: **CONDITIONS OF FLAMMABILITY:** Not flammable; water-based product **HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, methacrylate and other noxious gases **AUTOIGNITION TEMP.:** NAP **MINIMUM IGNITION ENERGY:** NAV **FLAMMABLE LIMITS:** (Lower) NAP% (Upper) NAP% **FIRE POINT:** NAV **FLASH POINT & METHOD:** NAP **SENSITIVITY TO MECHANICAL IMPACT?** No **SENSITIVITY TO STATIC DISCHARGE?** No **SPECIAL PROCEDURES:**

Firefighters should wear full-body protection & SCBA MEANS OF EXTINCTION: Water, water fog, dry chemical, foam or CO₂.

SECTION VI - ACCIDENTAL RELEASE MEASURES: Use kitty litter, sand or other to control spread and absorb liquid. **SECTION VII - HANDLING AND STORAGE: STORAGE REQUIREMENTS:** Keep from freezing. Store below 50°C. Keep container closed tightly to prevent drying out. **HANDLING PROCEDURES:** Treat as paint product. Use ventilation and protective equipment to suit conditions of use. Use soap and water for clean-up.

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION: PERSONAL PROTECTIVE EQUIPMENT: Avoid inhalation of liquid when applying. Use particulate respirator. **ENGINEERING CONTROLS:** Use mechanical ventilation to control aerosol or mist if product is sprayed. **SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES: PHYSICAL STATE:** Liquid **SOLUBILITY IN WATER:** soluble/miscible **APPEARANCE AND ODOR:** white colour, mild acrylic odour **FREEZING POINT:** 30F. **BOILING POINT:** 192C degrees **pH:** 8 **SPECIFIC GRAVITY:** 1.4 **ODOR THRESHOLD:** 0.08-25ppm **COEFF. WATER/OIL:** NAV **VAPOUR PRESSURE:** 17 mmHg @ 20C degrees **VAPOUR DENSITY (Air = 1):** 2.1 **EVAPORATION RATE:** slow% **VOLATILES:** less than 5

SECTION X - STABILITY AND REACTIVITY DATA: CONDITIONS OF REACTIVITY: stable **CONDITIONS OF INSTABILITY:** stable **CHEMICAL INCOMPATIBILITY:** strong acids or bases **CORROSIVE BEHAVIOR?** No **HAZARDOUS DECOMPOSITION PRODUCTS:** none known, no hazardous polymerization

SECTION XI - TOXICOLOGICAL PROPERTIES: ROUTES OF ENTRY: SKIN CONTACT ___ SKIN ABSORPTION ___ EYE CONTACT __X__ INHALATION ___ INGESTION __X__ **SYNERGISTIC PRODUCTS** None Known **EXPOSURE LIMITS:** mica 3 mg/m³ (ACGIH) **EFFECTS OF ACUTE EXPOSURE:** liquid splash could result in eye or nose irritations and/or headache **EFFECTS OF CHRONIC EXPOSURE:** excessive exposure to liquid product may result in minor irritations **MUTAGENICITY:** NAP **TERATOGENICITY:** NAP **REPRODUCTIVE TOXICITY:** NAP **CARCINOGENICITY:** ingredients not listed **SENSITIZATION:** not expected **IRRITANCY:** possible skin or eye irritation if not washed off.

SECTION XII - ENVIRONMENTAL INFORMATION: Air -this product is environmentally-friendly and poses no threat to the air. Water-the resins will be diluted and dissipate when flushed with water. Soil -the resin contents are bio degradable in ground acids over a period of time. No ecological hazards are known to exist.

SECTION XIII - WASTE DISPOSAL: Product spill should be contained by previously described absorption methods, and dried product disposed of as normal industrial waste according to all federal, state or governmental regulations.

SECTION XIV - TRANSPORT INFORMATION: No restriction to carriage, contents are water based but cannot freeze.

SECTION XV - REGULATORY INFORMATION: Regulatory agency controls and restrictions are minimal regarding conveyance or use of water-based products other than what has been specifically addressed.

SECTION XVI - OTHER INFORMATION: NONE

PREPARED BY: W.A. Coetzee, BSc Elect, BSc Mech, MBA (University of Wales) 16/11/2016