



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

Safety Data Sheet

Elementum Poly Grip Coating (Prod Code Aer024)

IDENTIFICATION OF PRODUCT AND COMPANY: PRODUCT IDENTIFIER: Elementum Poly Grip Coating (Aer024): Two-part polyurethane and aerogel. **MANUFACTURER:** Dry Tech Aerogels (Pty) Ltd. **ADDRESS:** 6 Rabie Street, Vanderbijlpark, 1911, Gauteng, South Africa. **PRODUCT USE:** Applied to provide a tough, protective topcoat. **EMERGENCY TELEPHONE NUMBER:** (016) 931 1640.

HAZARD IDENTIFICATION: The product is flammable, solvent-based polyurethane and should be treated according to all known safety precautions. Refer to Storage and Handling recommendations. Personal Protection, refer to section for transport.

HAZARDOUS INGREDIENTS: HAZARDOUS INGREDIENTS % CAS/PIN TLV PEL n-butyl acetate 32.46 123-86-4 150.00 150.00 Methyl Isobutyl Ketone 18.28 108-10-1 50.00 50.00 Toluol 15.27 108883 100.00 100.00 Ethyl 3-Ethoxypropionate 33.99 763-69-9 N/A.

FIRST AID MEASURES: **INHALATION:** Remove to fresh air. Give oxygen if required. Seek medical help. **EYES:** Flush w/clear lukewarm water for 15-20 minutes, occasionally lifting eyelids. See physician. **SKIN:** Remove contaminated clothing. Wash affected areas & clothing w/mild soap & water. **INGESTION:** Do not induce vomiting. Keep at rest. Get prompt medical attention.

FIREFIGHTING MEASURES: **CONDITIONS OF FLAMMABILITY:** Spraying or other activities to create finely divided droplets around open flame/sparks **HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, aldehydes, fumes **AUTOIGNITION TEMP.:** >499°C. **FLASH POINT & METHOD:** 40F. **TCC FLAMMABLE LIMITS:** (Lower) 1.4% (Upper) NAV **SENSITIVITY TO STATIC DISCHARGE?** N/A. **SENSITIVITY TO MECHANICAL IMPACT?** N/A **SPECIAL PROCEDURES:** Firefighters should wear full-body protection & SCBA **MEANS OF EXTINCTION:** Foam, water spray (fog), dry chemical, carbon dioxide & vaporizing liquid type extinguishing agents **SECTION VI - ACCIDENTAL RELEASE MEASURES:** Ventilate the area, control spill by covering w/sawdust or similar agent. Pour decontamination solution over spill (non-ionic surfactant Union Carbide's Tergitol TMN-10 (20%) + water (80%); avoid breathing vapours.

HANDLING AND STORAGE: Storage Requirements: Maintain temperature between 32-122F. degrees; average shelf life is 3 years @ 77F. degrees. Empty containers may contain residual liquid or vapours, and should not be pressurized, cut, welded or exposed to ignition sources. Handling Procedures/Equipment: Ground all containers; use non-sparking tools. Keep away from ignition sources as liquid contains volatiles that give off invisible vapours.

N/AP = Not Applicable N/A = Not Available

EXPOSURE CONTROLS AND PERSONAL PROTECTION: Personal Protective Equipment: Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection Engineering Controls: Mechanical exhaust fans; use explosion proof equipment.

PHYSICAL AND CHEMICAL PROPERTIES: APPEARANCE AND ODOR: Clear-coloured liquid, ester solvent odour SOLUBILITY IN WATER: Insoluble FREEZING POINT: NAP BOILING POINT: >241F. deg. pH: NAP SPECIFIC GRAVITY: 1.29 ODOR THRESHOLD: NAV COEFF. WATER/OIL: NAV EVAPORATION RATE: 1% VAPOUR DENSITY (Air = 1): 1.0+ VAPOUR PRESSURE: NAV VOLATILES: 54.1%N SECTION X - STABILITY AND REACTIVITY DATA: CONDITIONS OF REACTIVITY: By high heat or fire CHEMICAL INCOMPATIBILITY: Oxidizing materials, amino's, alcohols CONDITIONS OF INSTABILITY: Stable, under normal conditions HAZARDOUS DECOMPOSITION PRODUCTS: By high heat/fire--Carbon dioxide, carbon monoxide, fumes, smoke, aldehydes CORROSIVE BEHAVIOR? NO

HEALTH HAZARD DATA: Health effects to over exposure to CONCENTRATE: Corrosive to mucus membranes, eyes and skin. The seriousness of the lesions and the prognosis of intoxication depend directly upon the concentration and duration of exposure. Skin: May cause TEMPORARY skin discoloration and irritation Eyes: May cause severe eye damage If swallowed: HARMFUL OR FATAL - Causes chemical burns of mouth and stomach; Corrosive to gastrointestinal tract; Paleness and cyanosis of the face; Excessive fluid in the mouth and nose; Bloating of stomach and belching; Nausea and vomiting; Risk of chemical pneumonitis and pulmonary edema If inhaled: Vapours or mist can cause irritation. People with asthma or lung problems may be more affected.

ENVIRONMENTAL INFORMATION: Air: 2.04 lbs./gallon V.O.C. Water: Insoluble in water Soil: Lead- and chromate-free/not hazardous under RCRA 40CFR SECTION XIII - WASTE DISPOSAL: Incineration preferred. Dispose of in accordance with federal, state and local government regulations. SECTION XIV - TRANSPORT INFORMATION: Classified a hazardous material (Class 3//UN1263//P.G. II//F.P.=5C), and should be marked and handled according to specific regulations.

PREPARED BY: W.A. Coetzee, BSc Elect, BSc Mech, MBA (University of Wales) 21/11/2016