SAFETY DATA SHEET

Elementum Rust Protector (Product codes AER018 and AER019)

SECTION I - PRODUCT INFORMATION: PRODUCT IDENTIFIER: Elementum Rust Protector, PRODUCT INDENTIFIED: Global Harmonized System #3208.90.0000 MANUFACTURER: Dry Tech Aerogels (Pty) Ltd, 6 Rabie street, Prime Business Park, Vanderbijlpark, Gauteng, RSA, 1911. PRODUCT USE: Corrosion coating protection for steel and concrete surfaces EMERGENCY TELEPHONE NUMBER: (016) 931 1640.

SECTION II - HAZARD IDENTIFICATION: The product is a flammable, solvent-based product and should be treated according to all known safety precautions. Refer to Section VII for Storage and Handling recommendations, Section VIII for Personal Protection, Section XIV for transport.

SECTION III - HAZARDOUS INGREDIENTS: HAZARDOUS INGREDIENTS % CAS/PIN TLV PEL Aromatic 100 29.86% 64741-41-9 50.00 50.00 Mineral spirits 8.12% 64742-88-7 100.00 100.00 Diphenyl methane, Di isocyanate 6.90% 26447-40-5 Not established Not established Di isocyanate MDI Polyisocyanate 23.01% Proprietary Not established Not established 4,4 Diphenyl methane Di isocyanate 16.10% 101-68-8 .005-ceiling .02-ceiling (.051 mg/m3) (.200 mg/m3) Metallic paste 16.01% 7429-90-5 Not established Not established

SECTION IV - FIRST AID MEASURES: INHALATION: Remove to fresh air. Give oxygen if required. Seek medical help. EYES: Flush w/water for at least 15 minutes; see physician. SKIN: Remove contaminated clothing; wash affected areas w/mild soap & water. INGESTION: Do not induce vomiting. Give 1-2 glasses milk or water. Seek medical attention according to amount of product ingested.

SECTION V - FIREFIGHTING MEASURES: CONDITIONS OF FLAMMABILITY: Spraying/activities that create fine mist HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, isocyanate-based fume AUTOIGNITION TEMP.: 214^{o}C, MINIMUM IGNITION ENERGY: 6.1% FLASH POINT & METHOD: 44^{o}C. TCC FLAMMABLE LIMITS: (Lower) 1.4% (Upper) NAV% SENSITIVITY TO STATIC DISCHARGE? Yes SENSITIVITY TO MECHANICAL IMPACT? Possible due to aluminium content SPECIAL PROCEDURES: Firefighters should wear full-body protection & SCBA MEANS OF EXTINCTION: Foam, dry chemical, carbon dioxide; water fog to cool containers exposed to heat.

SECTION VI - ACCIDENTAL RELEASE MEASURES: Use kitty litter or similar absorbent to contain spill. Neutralize w/solution of 80% water/20% Tergitol TMN-10. Use protective clothing; use non-sparking tools. SECTION VII - HANDLING AND STORAGE: Storage Requirements: Maintain temperature between 32-122^{o}F; average shelf life is 3 years @ 77^{o}F. Handling Procedures/Equipment: Ground all containers; use non-sparking tools.

NAP = Not Applicable NAV = Not Available

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION: PERSONAL PROTECTIVE EQUIPMENT: To be worn when spraying or within contained areas--Half-face respirator w/organic vapor filter, safety glasses w/shields, PVA or nitrile chemical-resistant gloves, skin protection; for all other applications, good judgement should be used. ENGINEERING CONTROLS: To spray, mechanical exhaust ventilation is required

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES: PHYSICAL STATE: Liquid SOLUBILITYIN WATER: Insoluble APPEARANCE AND ODOR: Silver grey liquid, aromatic odour FREEZING POINT: NAP BOILING POINT: >150^{o}C, pH: NAP SPECIFIC GRAVITY: 1.1 ODOR THRESHOLD: 0.4ppm COEFF. WATER/OIL: NAV EVAPORATION RATE: very slow % VOLATILES: 45 VAPOUR DENSITY (Air=1): NAV VAPOUR PRESSURE: 8mmHg@20^{o}C.

SECTION X - STABILITY AND REACTIVITY: CONDITIONS OF REACTIVITY: Dry aluminium powder CORROSIVE? No CHEMICAL INCOMPATIBILITY: Ammonium nitrate chorofluoro carbons, chlorinated solvents, zinc rich greater than or equal to 8.2 kilo of organic zinc per gallon, strong bases, peroxides, amines CONDITIONS OF INSTABILITY: Impact, heat, friction HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen gas, reactive chlorides

SECTION VI - 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 enema If inhaled: Vapours or mist can cause irritation. People with asthma or lung problems may be more affected.

SECTION XII - ENVIRONMENTAL INFORMATION: Air: 3.17 lbs./gallon; 380 grams/litre V.O.C. Water: Insoluble in water; reacts slowly w/water forming polyuria polymer and liberating CO2 gas Soil: Lead- and chromate-free, not hazardous under RCRA 40CFR

SECTION XIII - WASTE DISPOSAL: Dispose of as paint/aluminium waste according to local regulations. SECTION XIV - TRANSPORT INFORMATION: Product is considered hazardous material, to be handled according to Class 3//UN1263//P.G. III guidelines. Tariff code: 3208.90.0000

SECTION XV - REGULATORY INFORMATION: No listed materials under Superfund Amendments & Reauthorization Act of 1988 (SARA) 302, 304, 311, 312, and 313

SECTION XVI - OTHER INFORMATION: NAP

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