



SAFETY DATA SHEET

DATE: 11/2024

SECTION ONE – PRODUCT IDENTIFICATION

PRODUCT NAME: BioSpan Encapsulate Bonding Agent

DESCRIPTION: Non-Toxic aggregate bonding agent

SYNONYMS: Sand bonding agent; dust control agent

SDS Encapsulate #01

GENERAL PRODUCT USE: Stabilizes aggregate and sand topical treatments to retard dust formation

APPEARANCE AND ODOR: Pale yellow, clear to slightly hazy, slight orange fragrance

SUPPLIERS NAME: BIOSPAN TECHNOLOGIES, INC.

6540 MEYER DRIVE, WASHINGTON, MISSOURI 63090

SUPPLIERS PHONE NUMBER: (636) 583-7974

TRANSPORTATION EMERGENCY PHONE NUMBER: CHEMTEC NUMBER (800) 262-8200

S.A.R.A. INFORMATION

HAZARDS: FIRE: YES PRESSURE: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO

PHYSICAL DATA: MIXTURE: YES PURE: NO SOLID: NO LIQUID: YES GAS: NO

SECTION TWO – HAZARDS IDENTIFICATION

NONE

SECTION THREE – COMPOSTION / INFORMATION ON INGREDIENTS

CHEMICAL NAME:

APPROXIMATE WEIGHT %

SECTION FOUR – FIRST AID MEASURES

PRIMARY ROUTES OF ENTRY

SKIN CONTACT X
INHALATION XEYE CONTACT X
INGESTION**EMERGENCY AND FIRST AID PROCEDURES:**

Eyes: Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention. If physician not available, flush for additional 15 minutes and then transport victim to medical care. Washing eyes within one minute is essential to achieve maximum effectiveness.

Skin: Wash with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before reuse.

Ingestion: If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting occurs, give fluids again. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person. Get immediate medical attention.

Inhalation: Remove from area to fresh air. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available. Get immediate medical attention.

ODOR THRESHOLDS: None

HEALTH HAZARDS (ACUTE AND CHRONIC): SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eyes – irritation from direct contact. Prolonged contact with membranes of mouth, esophagus & stomach may cause irritation and dermatitis due to deflating of the skin. Inhalation – may cause respiratory irritation and coughing. Ingestion – harmful if swallowed.

CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE: Persons with pre-existing skin disorders may be more susceptible to irritating effects. Persons with pre-existing lung disorders may be more susceptible to irritating effects.

CARCINOGENICITY: None

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, as well as oxygen and measures to support breathing manually or mechanically may be needed. If persistent, convulsions may be controlled by the cautious intravenous injection of a short acting barbiturate drug.

SECTION FIVE – FIREFIGHTING MEASURES

REACTIVITY WITH WATER: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

AUTO IGNITION TEMPERATURE: NONE

UPPER EXPLOSION LIMIT (%): NOT KNOWN

LOWER EXPLOSION LIMIT (%): NOT KNOWN

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or universal-type foam

THERMAL DECOMPOSITION PRODUCTS: Burning of material may release carbon dioxide, carbon monoxide

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus, and complete protective clothing

SECTION SIX – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Floors may become slippery. Use protective equipment stated in section eight. Contain liquid spills using a barrier or inert material such as sand or by diking the area. Absorb spilled liquid using inert material. Scoop or shovel absorbed material or spilled solids into containers. Avoid creating a dust during transfer of solids. Wash area with soap and water.

WASTE DISPOSAL METHODS: The waste product is not a federal hazardous waste according to U.S. EPA regulation 40 CFR 261.

SECTION SEVEN – HANDLING AND STORAGE

PRECAUTIONS FOR STORAGE AND HANDLING: Store in dry, and well-ventilated area. Keep containers closed. Do not enter storage area unless area is adequately ventilated.

WORK/HYGIENIC PRACTICES: Wash thoroughly after handling. Wash contaminated clothes before reuse. Launder work clothes. Check protective clothing, particularly impervious gloves, for leaks before use.

SECTION EIGHT – EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT: Goggles, impervious or chemical resistant gloves, and impervious clothing to prevent skin contact.

RESPIRATORY PROTECTION: In well-ventilated areas protection is not normally required.

Other protective equipment: Eye wash station and safety shower should be easily accessible

SECTION NINE – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 320-330°F

VAPOR DENSITY: Liquid

PERCENT VOLATILE (BY WEIGHT): N / A

VAPOR PRESSURE: 0.93 MM @ 20°C

SOLUBILITY IN WATER: Miscible

SPECIFIC GRAVITY: 0.8935 (H₂O = 1.0)

AUTO IGNITION TEMPERATURE: N / A

pH: 5.6 – 5.8

LOWER EXPLOSION LIMIT %: NOT KNOWN

UPPER EXPLOSION LIMIT: NOT KNOWN

EXTINGUISHING MEDIA: Carbon Dioxide, Dry chemical or universal-type foam.

THERMAL DECOMPOSITION PRODUCTS: Burning of material may release carbon dioxide, carbon monoxide

SECTION TEN – STABILITY AND REACTIVITY

SENSITIVITY TO STATIC DISCHARGE: None

REACTIVITY WITH WATER: None

REACTION DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION

MAY WILL NOT
OCCUR OCCUR X

CONDITIONS TO AVOID

strong alkalis and oxidizing agents

SECTION ELEVEN – TOXICOLOGICAL INFORMATION

CHEMICALS LISTED AS CARCINOGEN BY: (YES OR NO)

NATIONAL TOXICOLOGY PROGRAM NO

I.A.R.C. MONOGRAPHS NO

OSHA NO

SECTION TWELVE – ECOLOGICAL INFORMATION

Biodegradability: No

Aquatic toxicity: Marine pollutant in excess of 1000 gallons of water. The formulations are immiscible in water. The formulations are known to evaporate quickly and biodegrade and should not cause long-term effects.

Bioaccumulation Potential: Not determined. All materials used in formulations are known to be non-accumulating in the environment.

SECTION THIRTEEN – DISPOSAL CONSIDERATIONS

RCRA hazardous waste– Classified as a RCRA hazardous waste— (Flammability characteristics only)

Disposal methods: Dispose of this material by either incineration or by a licensed waste disposal company. Contaminated absorbent material may be disposed of in an approved landfill. Follow all local, state and Federal disposal regulations.

WASTE DISPOSAL METHODS: Incinerate, bury in an approved manner or dispose of in accordance with pertinent federal, state, or local regulations.

SECTION FOURTEEN – TRANSPORT INFORMATION

DOT: Proper shipping name:

Formulated solution containing: Fatty acid esters, Identification Number 144920, UN hazard class N/a< Terpene hydrocarbons, n.o.s., 3, UN 2319, PGIII, Exemptions: chemicals, n.o.l. (NON-REGULATED)- allowable for shipment in non-bulk containers: IATA: terpene hydrocarbons, n.o.s., UN2319, PGIII

SECTION FIFTEEN – REGULATORY INFORMATION

OSHA: This product is slightly hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910. 1200: However, thermal decomposition fumes from this product may be hazardous under sections 2 and 3.

CERLA-SARA CLASSIFICATION(S):

Ingredients present in products that may require reporting under Section 311-312 of SARA title III as defined in:

40 CFR 372: EXTREMELY HAZARDOUS SUBSTANCES: NONE

40 CFR 372: Fire Hazard

Section 313 of SARA title III as defined in 40 CFR 372: Toxic Chemicals: NONE

CLEAN AIR ACT, OZONE DEPLETING SUBSTANCES:

This product does not contain nor was it manufactured with Class I or Class II ozone depleting substances as defined by the Clean Air Act Amendments of 1990.

SECTION SIXTEEN – OTHER INFORMATION

Hazardous ratings (0=minimal, 1=slight, 2=moderate, 3= serious, 4= severe)

HMIS RATINGS:

Health = 1, Flammability = 1 Reactivity = 0 Personal Protective Equipment = G, eye protection

NFPA:

Health =1 , Flammability=1, reactivity=0

EXPOSURE LIMITS: (N.E. = None Established)

PREPARED BY: BioSpan Technologies, Inc.
11/2024