

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

**1.1 Product identifier**

**Product name:** BIO-DEK™ Bond Coat, Part A  
**Product code:** BIO-DEK™ Bond Coat, Part A  
**Synonym(s):** Epoxy resin

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**General use:** Coating resin  
**Uses advised against:** None known

**1.3 Details of the supplier and of the safety data sheet**

**Manufacturer/Distributor**  
 BIO-DEK™, LLC  
 2827 Andrew Ave  
 Pascagoula, MS 39567 USA  
 +1-228-205-3255

**1.4 Emergency telephone number**

CHEMTREC: +1-800-424-9300 - 24 HR EMERGENCY

**SECTION 2 - HAZARDS IDENTIFICATION**

**2.1 Classification of substance or mixture**

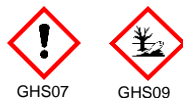
**Product definition:** Mixture

**Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008**

Skin Irritation - Category 2 [H315]  
 Sensitizer, Skin - Category 1 [H317]  
 Eye Irritation - Category 2A [H319]  
 Aquatic Toxicity, Chronic - Category 2 [H411]

**2.2 Label elements**

**Hazard symbol(s):**



**Signal word:**

**Warning**

**Hazard statement(s):**

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H411 - Toxic to aquatic life with long lasting effects

**Precautionary statements**

**[Prevention]**

P261 - Avoid breathing mist or vapor.  
 P264 - Wash hands and other exposed skin areas thoroughly after handling.  
 P272 - Contaminated work clothing should not be allowed out of the workplace.  
 P273 - Avoid release to the environment.  
 P280 - Wear protective gloves, protective clothing and eye protection.

**[Response]**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
 P321 - Specific treatment: Call a POISON CENTER or doctor if you feel unwell. Refer to Section 4 of this SDS.  
 P333 + P337 + P313 - If skin irritation or rash occurs or eye irritation persists: Get medical attention.  
 P362 - Take off contaminated clothing and wash before reuse.  
 P391 - Collect spillage.

**[Disposal]**

P501 - Dispose of contents and containers in accordance with national and local regulations.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

None as defined under 29 CFR 1900.1200.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable

### 3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
60 - 85	Bisphenol A/epichlorohydrin epoxy resin	Proprietary	-----	-----	H315, H317, H319, H411
5 - 35	Reactive diluent	Proprietary	-----	-----	H312, H315, H317, H319, H332, H412

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with the applicable provisions of paragraph (i).

There are no additional ingredients present in this product which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## SECTION 4 - FIRST AID MEASURES

### 4.1 Description of first aid measures

**Inhalation:** If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist or if the victim feels unwell, seek medical attention.

**Eyes:** Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist.

**Skin:** Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. Discard items that cannot be decontaminated, including leather articles such as shoes, belts and watchbands. If irritation persists or rash develops, seek medical attention.

**Ingestion:** Rinse mouth with water if the victim is conscious. Remove dentures if present. Give 1 - 2 cupfuls of water to drink if the victim is conscious, alert and able to swallow. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential health symptoms and effects

**Eyes:** Causes serious eye irritation. Symptoms may include redness, swelling, pain and tearing. Vapor or fumes can cause eye irritation.

**Skin:** Causes skin irritation. Prolonged contact with unprotected skin can cause localized redness, itching, blisters, chemical burns and discomfort. May cause an allergic skin reaction with subsequent sensitization. Persons previously sensitized can experience allergic skin reactions with symptoms of redness, itching, swelling and rash upon re-exposure to material.

**Inhalation:** Not expected to be an inhalation hazard due to the low volatility of this material. May cause respiratory irritation when heated with runny nose, cough, sore throat, sneezing, wheezing and shortness of breath.

**Ingestion:** Causes irritation of the gastrointestinal tract with nausea, vomiting, abdominal pain and diarrhea. Aspiration of material into the lungs during swallowing or vomiting causing lung inflammation and chemical pneumonitis, which may be fatal. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish colored skin, rapid breathing and rapid heart rate

**Chronic:** Persons with pre-existing eye, skin and chronic respiratory disorders may be more susceptible to the effects of this material. May cause skin sensitization with subsequent contact dermatitis upon re-exposure to this material in susceptible individuals.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Advice to doctor and hospital personnel

Treat symptomatically and supportively.

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable methods of extinction:** Use extinguishing media such as water fog or spray, carbon dioxide, alcohol resistant foam or dry chemical.

**Unsuitable methods of extinction:** Water jets or streams may spread the fire.

### 5.2 Special hazards arising from the substance or mixture

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

**Explosion hazards:** This product is not considered to be an explosion hazard. Avoid high temperatures and hot surfaces.

### 5.3 Advice to firefighters

Firefighters should wear full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Firefighters must control runoff to prevent environmental contamination. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing and equipment designated in Section 8.2, including respiratory protection. Ventilate the area. Remove all sources of ignition. NO SMOKING. Clean up spills immediately. Spill creates a slip hazard.

### 6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements.

### 6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. DO NOT FLUSH SPILL DOWN THE DRAIN. Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

See Section 13 for additional waste treatment information.

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. NO SMOKING. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Wash contaminated clothing and shoes thoroughly before reuse. Discard items that cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

#### Advice on protection against fire and explosion

Keep away from heat, hot surfaces and incompatible materials.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Store between 10 - 35 °C (50 - 95 °F). Prolonged storage of material or cold temperatures may result in reversible crystallization. Crystallized material can be liquified by heating slowly to 50 °C (122 °F) for 6 - 24 hours.

Transfer only to approved containers having correct labeling. Keep container tightly closed when not in use. Protect containers from physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they contain product residue. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Keep out of reach of children.

### 7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Engineering measures:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

**Individual protection measures:** Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures:** Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

**Eye/face protection:** Wear chemical goggles or safety glasses with unperforated side shields during use.

**Hand protection:** Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

**Skin protection:** Wear protective clothing. Wear protective boots if the situation requires.

**Respiratory protection:** Always use an approved respirator when vapor/aerosols exceed permissible exposure limits. Where risk assessment shows air-purifying respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

**Environmental exposure controls:** Do not empty into drains.

*PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.*



## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Clear, pale yellow liquid
<b>Odor</b>	Mild, characteristic
<b>Odor Threshold</b>	No data available
<b>Molecular Weight</b>	Not applicable
<b>Chemical Formula</b>	Not applicable
<b>pH</b>	Neutral (1:1 in water)
<b>Melting Point</b>	Not applicable
<b>Initial Boiling Point</b>	> 60 °C (> 140 °F)
<b>Evaporation Rate</b>	<1 [n-BuOAc = 1]
<b>Flammability (solid, gas)</b>	Not applicable
<b>Flash Point</b>	> 50 °C (> 122 °F)
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Lower Explosive Limit (LEL)</b>	2.6% (v)
<b>Upper Explosive Limit (UEL)</b>	13% (v)
<b>Vapor Pressure</b>	0.3 mm Hg @ 25 °C
<b>Vapor Density</b>	> 1 [Air = 1]
<b>Specific Gravity</b>	1.11
<b>Bulk Density</b>	9.25 lb/gal
<b>Viscosity</b>	1,500 cPs @ 25 °C
<b>Solubility in Water</b>	< 0.24 g/l at 20 °C
<b>Partition Coefficient (n-octanol/water)</b>	log P <sub>ow</sub> = 3 [estimated]
<b>Oxidizing Properties</b>	Not applicable
<b>Explosive Properties</b>	Not applicable
<b>Volatiles by Weight @ 21 °C</b>	< 1%

### 9.2 Other Data

No data available

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

No special reactivity has been reported during normal conditions of handling and use.

### 10.2 Chemical Stability

This material is stable under recommended conditions of storage and handling. Prolonged storage of material may result in reversible crystallization. Crystallized material can be liquified by heating slowly to 50 °C (122 °F) for 6 - 24 hours.

### 10.3 Possibility of hazardous reactions

Reacts exothermically with amines, generating considerable heat buildup.

### 10.4 Conditions to avoid

Avoid high temperatures, hot surfaces and contact with incompatible materials. Avoid short term exposures to temperatures > 300 °C (572 °F) and prolonged exposure to temperatures > 250 °C (482 °F). Potentially violent decomposition can occur above 350 °C (662 °F).

### 10.5 Incompatible materials

Strong oxidizing agents, strong bases, strong acids, amines

### 10.6 Hazardous decomposition products

Thermal decomposition products may include oxides of carbon, phenolics, aldehydes, smoke, toxic fumes and gases.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute oral toxicity

LD<sub>50</sub>, rat: > 5,000 mg/kg [calculated]

**Acute inhalation toxicity**

No data available

**Acute dermal toxicity**

LD<sub>50</sub>, rabbit: > 4,000 mg/kg [calculated]

**Skin irritation**

Causes skin irritation.

**Eye irritation**

Causes severe eye irritation.

**Sensitization**

May cause an allergic skin reaction.

**Carcinogenicity**

No data available

**Germ cell mutagenicity**

No data available

**Reproductive toxicity**

No data available

**Specific organ toxicity - single exposure**

No data available

**Specific organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Further information**

This product contains no substances present at levels greater than or equal to the 0.1% threshold (de minimis) that are identified as a probable, possible, potential or confirmed carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates it causes adverse developmental or fertility effects.

Handle in accordance with good industrial hygiene and safety practice.

**SECTION 12 - ECOLOGICAL INFORMATION****12.1 Toxicity**

This material is toxic to aquatic life with long lasting effects.

**Toxicity to fish:** LC<sub>50</sub> - Pimephales promelas (Fathead minnow), static, 96 h: 3.9 mg/l

**Toxicity to aquatic invertebrates:** EC<sub>50</sub> - Daphnia magna (water flea), 48 h: 4.2 mg/l

**12.2 Persistence and degradability**

This material cannot be considered readily biodegradable.

**12.3 Bioaccumulation potential**

The bioaccumulation potential for this material is moderate.

**12.4 Mobility in soil**

The potential for mobility in soil is low.

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other effects****Additional ecological information**

Do not allow material to enter surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**SECTION 13 - DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products in accordance with national, state and local regulations. Disposal of this product should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**RCRA F-Series:** No listings above the reportable threshold (de minimis)

**RCRA U-Series:** No listings above the reportable threshold (de minimis)

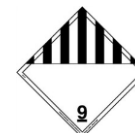
## SECTION 14 - TRANSPORT INFORMATION

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

*Limited quantity for miscellaneous materials in Packing Group III when inner packagings are not over 5.0 liters (1.3 gallons) net capacity each, packed in a strong outer packaging.*

<b>USA DOT (Ground Transportation)</b>	<b>NOT REGULATED FOR TRANSPORT</b>
<b>IMO/IMDG (Water Transportation)</b>	
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquids, n.o.s. (Epoxy resins)
<b>Hazard Class</b>	9
<b>UN/NA</b>	UN3082
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes
<b>EMS Number</b>	F-A, S-F
<b>ICAO/IATA (Air Transportation)</b>	
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquids, n.o.s. (Epoxy resins)
<b>Hazard Class</b>	9
<b>UN/NA</b>	UN3082
<b>Packing Group</b>	III
<b>Quantity Limitations</b>	49 CFR 175.27 and 175.75 - Cargo Aircraft Only: No limit; Passenger Aircraft: No limit
<b>RID/ADR (Rail Transportation)</b>	<b>NOT REGULATED FOR TRANSPORT</b>

**Placard(s)**



Marine Pollutant placard for IMO/IMDG only

## SECTION 15 - REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

#### U. S. Federal Regulations

**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

**OSHA Process Safety Management Standard:** This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

**EPA Risk Management Planning Standard:** This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

**EPA Federal Insecticide, Fungicide and Rodenticide Act:** This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

**Toxic Substance Control Act (TSCA) Inventory:** All substances in this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

**Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b)) and 1310.4(f)(2)) and Chemical Code Number**  
No listings

**Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number:** No listings

**Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals:** No listings

#### **Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** Causes skin irritation and serious eye irritation                      May cause an allergic skin reaction

**SARA 313 Information:** None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substances:** None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by these sections of Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains no CERCLA reportable substances.

#### **Clean Air Act (CAA)**

This product does not contain Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain Class 1 ozone depletors.

This product does not contain Class 2 ozone depletors.

#### **Clean Water Act (CWA)**

This product does not contain Hazardous Substances listed.

This product does not contain Priority Pollutants.

This product does not contain Toxic Pollutants.

#### U.S. State Regulations

##### **California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986**

**⚠ WARNING:** This product can expose you to Epichlorohydrin (< 20 ppm), which is known to the state of California to cause cancer, birth



defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### Other U.S. State Inventories

None of the components in this product exceed of the reporting threshold (de minimis) of any State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists.

#### Canada

##### WHMIS Hazard Classification

May cause an allergic skin reaction

**Canadian National Pollutant Release Inventory (NPRI):** This product contains no chemicals above the reporting threshold (de minimis) listed on the NPRI.

#### European Economic Community

**WGK, Germany (Water danger/protection):** 2 (obviously hazardous to water)

#### Global Chemical Inventory Lists

Country	Inventory Name	Listed
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (KECI)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*Yes - All components of this product comply with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory or are exempt from listing.

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16 - OTHER INFORMATION

### Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	2
PERSONAL PROTECTION	C

C = safety goggles, gloves & apron

### HMIS Hazard Rating Legend

0 = Minimal 1 = Slight 2 = Moderate

3 = Serious 4 = Severe

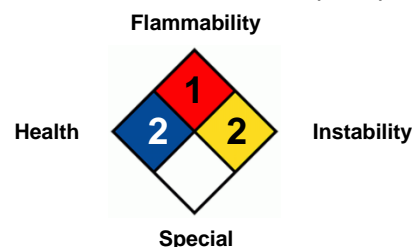
\* = Chronic Health Hazard

### NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate

3 = High 4 = Extreme

### National Fire Protection Association (NFPA)



### Full Text of GHS Hazard Phrases Referenced in Section 3 (not covered in Section 2)

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H412 - Harmful to the aquatic life with long lasting effects

### Abbreviation Key

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists	<b>LD<sub>50</sub></b>	Lowest Lethal Dose
<b>ADR</b>	Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)	<b>mppcf</b>	Millions of Particles Per Cubic Foot
<b>CAS</b>	Chemical Abstract Services	<b>NA</b>	North America
<b>CFR</b>	Code of Federal Regulations	<b>NAERG</b>	North American Emergency Response Guide Book
<b>COC</b>	Cleveland Open Cup	<b>NIOSH</b>	National Institute for Occupational Safety & Health
<b>DOT</b>	Department of Transportation	<b>NTP</b>	National Toxicology Program
<b>EC<sub>50</sub></b>	Half maximal effective concentration	<b>OSHA</b>	Occupational Safety and Health Administration
<b>EMS</b>	Emergency Response Procedures for Ships Carrying	<b>PBT</b>	Persistent, Bioaccumulating and Toxic
<b>EPA</b>	Environmental Protection Agency	<b>PEL</b>	Permissible exposure limit
<b>ErC<sub>50</sub></b>	Reduction of Growth Rate	<b>PMCC</b>	Pensky-Martens Closed Cup
<b>ERG</b>	Emergency Response Guide Book	<b>ppm</b>	Parts Per Million
<b>FDA</b>	Food and Drug Administration	<b>RCRA</b>	Resource Conservation and Recovery Act
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)	<b>RID</b>	Dangerous Goods by Rail
<b>HCS</b>	Hazard Communication Standard	<b>RQ</b>	Reportable Quantity
<b>IARC</b>	International Agency for Research on Cancer	<b>TCC/Tag</b>	Tagliabue Closed Cup
<b>IATA</b>	International Air Transport Association	<b>TLV</b>	Threshold Limit Value
<b>IC<sub>50</sub></b>	Half Maximal Inhibitory Concentration	<b>TSCA</b>	Toxic Substance Control Act

**ICAO** International Civil Aviation Organization  
**IDLH** Immediately Dangerous to Life and Health  
**IMDG** International Maritime Dangerous Goods  
**IMO** International Maritime Organization  
**LC<sub>50</sub>** 50% Lethal Concentration  
**LD<sub>50</sub>** 50% Lethal Dose

**TWA** Time-weighted Average  
**UN** United Nations  
**VOC** Volatile Organic Compounds  
**vPvB** Very Persistent and Very Bioaccumulating  
**WHMIS** Workplace Hazardous Materials Information System

#### **DISCLAIMER OF RESPONSIBILITY**

The information herein is given in good faith and is believed to be accurate and correct; however, no warranty, expressed or implied, is made. BIO-DEK™, LLC assumes no responsibility for personal injury or property damage that may arise from the use of this material since the conditions of handling and use are beyond our control. It is the responsibility of the user to determine the suitability of this information for the adoption of the safety precautions as may be necessary. It is the responsibility of the user to comply with all Federal, State and local laws and regulations regarding use of this product. Vendees or users assume all risks associated with the use of this material. We reserve the right to revise Safety Data Sheets from time to time as new technical information becomes available. The user has the responsibility to contact the company to make sure that the Safety Data Sheet is the latest issue.

Prepared date: 08 April 2022

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