

## PRODUCT INFORMATION

TRADE NAME (AS LABELED): Chopped Strand Fiberglass Mat

SUPPLIER/MANUFACTURER'S NAME: Pli-Dek Systems, Inc.  
ADDRESS: 41610 Date Street, #104  
Murrieta, CA 92562DATE OF PREPARATION: April 5, 2011  
REVISION DATE: January 31, 2014

## COMPOSITION AND INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS#	OSH PEL mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>	NIOSH REL mg/m <sup>3</sup>	VAPOR PRESSURE MM Hg @ Temp		% By Weight
Glass, Oxide	65997-17-3	15mg/5mg	10mg	5mg	N/A	N/A	90%
Organic Polymer Solids (cured)	NE	N/A	N/A	None	N/A	N/A	2%
2 Butenedioic Acid (E)-, polymer with 1,2- Ethanedio; and .a.a.'[(1- Methyketalkudene) di- 4, 1-Phenylene] bis [.w.- Hydroxypoly[oxy(Methyl -1,2-Ethanediyl)]]	39382-21-3	N/A	N/A	None	N/A	N/A	4%
<p>NE = Not Established. C = Ceiling Limit. See OTHER INFORMATION section for Definitions of Terms Used.</p> <p>NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-19 format.</p> <p>Specific Chemical Ingredients Held as Trade Secret. This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances no 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.</p>							

## HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS:INHALATION: Temporary upper respiratory irritation.SKIN CONTACT: Temporary skin irritation seen in certain individuals.EYE CONTACT: Unlikely. Contact physician if unusual reaction is noted.INGESTION: None Known

## FIRST AID MEASURES

SKIN EXPOSURE: Cleanse with soap and water. Get medical help if irritation persists.EYE EXPOSURE: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.INHALATION: Move subject to fresh air and get medical help if irritation persists.INGESTION: Unlikely. Contact physician if unusual action is noted.

## FIRE FIGHTING MEASURES

FLASH POINT, °C (method): Non-Combustible  
AUTOIGNITION TEMPERATURE, °C: ND  
FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): ND  
Upper (UEL): ND

### FIRE EXTINGUISHING MATERIALS:

<u>Water Spray:</u>	YES	<u>Carbon Dioxide:</u>	YES
<u>Foam:</u>	YES	<u>Dry Chemical:</u>	YES
<u>Halon:</u>	ND	<u>Other:</u>	Any "ABC" Class.

### SPECIAL FIRE FIGHTING PROCEDURES:

Size materials may thermally decompose or burn emitting toxic fumes and smoke including carbon dioxide and carbon monoxide.

## ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK RESPONSE: Vacuum dust deposits.

## HANDLING AND STORAGE

HANDLING: When handling and/or applying this product: Wear long sleeves gloves and a cap. Wear eye protection (goggles, safety glasses, or face mask). Use a NIOSH/MSHA approved dust respirator such as a 3M model # 8710 or # 9900 or equivalent.

AFTER HANDLING AND/OR APPLYING THIS PRODUCT: Bathe with soap and warm water. Wash work clothes separately and rinse washer after use.

STORAGE: Store under cover to protect product

PERSONAL PROTECTIVE EQUIPMENT: Respirators: Wear NIOSH/MSHA approved respirators when handling and applying fiber glass products in accordance with the following NIOSH based exposure guidelines.

<u>Exposure</u>	<u>Respirator (or equivalent)</u>
Less than 10 times NIOSH REL	3M 8710 or 3M 9900
Less than 50 times NIOSH REL	MSA Ultra Twin Full-Face Respirator with Type H Filter (HEPA)

OTHER: When glass fiber is used as reinforcement in plastic materials, caution must also be exercised with the resin and curing catalysts employed and the mixing process used to disperse the fiber in the resin. When the fiber reinforced material is abraded or machined, control of the released dust must be established. Additional Respiratory protection may be necessary for protection from vapors and mists emitted from these resins and catalysts.

## PHYSICAL AND CHEMICAL PROPERTIES

<u>PHYSICAL STATE:</u>	<u>SOLID</u>
<u>BOILING POINT (°F):</u>	<u>&gt;1600°F</u>
<u>MELTING POINT (°F):</u>	<u>&gt;1600°F</u>
<u>SOFTENING POINT (°F):</u>	<u>APPROX. 1550°F</u>
<u>FREEZING POINT:</u>	<u>NONE</u>
<u>ODOR:</u>	<u>NONE</u>
<u>COLOR:</u>	<u>WHITE</u>
<u>APPEARANCE:</u>	<u>FIBERS ASSEMBLED INTO ROVINGS, MATS, YARNS, FABRICS, CHOPPED STRANDS</u>
<u>VAPOR DENSITY: (AIR=1):</u>	<u>NOT MEASURABLE</u>
<u>SPECIFIC GRAVITY (H<sub>2</sub>O=1):</u>	<u>GLASS= 2.6</u>
<u>EVAPORATIVE RATE (ETHYL ETHER=1):</u>	<u>DOES NOT HAVE VAPOR PRESSURE</u>
<u>VAPOR PRESSURE:</u>	<u>DOES NOT HAVE VAPOR PRESSURE</u>
<u>% VOLATILE BY VOLUME (MMH8@20°C):</u>	<u>NOT VOLATILE</u>
<u>% SOLUBILITY (IN WATER):</u>	<u>SMALL</u>
<u>PH:</u>	<u>NEUTRAL</u>



## STABILITY AND REACTIVITY

<u>STABILITY:</u>	Chemically stable
<u>CORROSIVITY:</u>	Not corrosive
<u>REACTIVITY:</u>	Not reactive
<u>REACTIVITY WITH WATER:</u>	Not reactive
<u>INCOMPATIBLE SUBSTANCES:</u>	Hydrofluoric Acid

## TOXICOLOGICAL INFORMATION

Extensive medical-scientific research has been conducted regarding the health aspects of fiberglass over the past 50 years. The International Agency for Research on Cancer (IARC), an agency of the World Health Organization (WHO), at a meeting in June 1987, reviewed all of the significant research on the health effects attributed to fiber glass. IARC determined that the data from both human and animal studies was inadequate to continuous filament glass fibers, such as used in our fiberglass reinforcement products, as carcinogenic to humans. IARC classified glass wool, which is used in some insulation products, as a category 2B, "possibly carcinogenic to humans." This classification was based largely on animal implantation experiment. For further information on glass wool products, refer to Certain Teed's fiber glass wool products Material Safety Data Sheets.

## ECOLOGICAL INFORMATION

This product is not manufactured with, nor does it contain any, Class I Ozone depleting chemicals as defined by EPA in Title VI of the Clean Air Act Amendments of 1990 40 CFR part 82, Protection of Stratospheric Ozone. This product is not classified as a hazardous air pollutant in Title II Clean Air Act of 1990.

## DISPOSAL CONSIDERATIONS

Scrap material should be disposed of in a sanitary landfill in accordance with federal, state and local regulations. Waste material is not considered hazardous as defined by RCRA (40 CFR part 261).

## TRANSPORTATION INFORMATION

National Motor Freight Classification (NMFC): 49430, rovings or yarn, glass fiber; or strand, glass fiber in continuous lengths or chopped in packages.

Class: 85

## OTHER INFORMATION

### DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

#### CAS #:

This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

#### EXPOSURE LIMITS IN AIR:

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.

TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level. Skin adsorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.

IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. The DFG - MAK is the Republic of



Germany's Maximum Exposure Level, similar to the U.S. PEL. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs). When no exposure guidelines are established, an entry of NE is made for reference.

#### HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: Health Hazard: 0 (minimal acute or chronic exposure hazard); 1 (slight acute or chronic exposure hazard); 2 (moderate acute or significant chronic exposure hazard); 3 (severe acute exposure hazard; onetime over-exposure can result in permanent injury and may be fatal); 4 (extreme acute exposure hazard; onetime over-exposure can be fatal). Flammability Hazard: 0 (minimal hazard); 1 (materials that require substantial pre-heating before burning); 2 (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); 3 (Class IB and IC flammable liquids with flash points below 38°C [100°F]); 4 (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]). Reactivity Hazard: 0 (normally stable); 1 (material that can become unstable at elevated temperatures or which can react slightly with water); 2 (materials that are unstable but do not detonate or which can react violently with water); 3 (materials that can detonate when initiated or which can react explosively with water); 4 (materials that can detonate at normal temperatures or pressures).

#### NATIONAL FIRE PROTECTION ASSOCIATION:

Health Hazard: 0 (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); 1 (materials that on exposure under fire conditions could cause irritation or minor residual injury); 2 (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); 3 (materials that can on short exposure could cause serious temporary or residual injury); 4 (materials that under very short exposure could cause death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

#### FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

#### TOXICOLOGICAL INFORMATION:

Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: LD<sub>50</sub> - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC<sub>50</sub> - Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed in parts of material per million parts of air or water; mg/m<sup>3</sup> concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based on their body weight in kg. Data from several sources are used to evaluate the cancer-causing potential of the material. The sources are: IARC - the International Agency for Research on Cancer; NTP - the National Toxicology Program, RTECS - the Registry of Toxic Effects of Chemical Substances, OSHA and CAL/OSHA. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other measures of toxicity include TD<sub>Lo</sub>, the lowest dose to cause a symptom and TC<sub>Lo</sub> the lowest concentration to cause a symptom; TD<sub>o</sub>, LD<sub>Lo</sub>, and LD<sub>o</sub>, or TC, TCo, LC<sub>Lo</sub>, and LC<sub>o</sub>, the lowest dose (or concentration) to cause death. BEI - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

#### REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. EPA is the U.S. Environmental Protection Agency. WHMIS is the Canadian Workplace Hazardous Materials Information System. DOT and TC are the U.S. Department of Transportation and the Transport Canada, respectively. Other acronyms used are: Superfund Amendments and Reauthorization Act (SARA); the Toxic Substance Control Act (TSCA); Marine Pollutant status according to the DOT; California's Safe Drinking Water Act (Proposition 65); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund); and various state regulations. This section also includes information on the precautionary warnings which appear on the materials package label.

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