

## 1. PRODUCT AND COMPANY IDENTIFICATION

**K-Bin, Inc.** Customer Service/Technical: 979-233-6610 (8:00-5:00 Central Time)  
**5616 Hwy 332 East**  
**Freeport, TX 77541**

NAME USED ON LABEL: *Dryblends are identified by the prefix **KBD-** followed by an alphanumeric code denoting grade and color.*

CHEMICAL NAME: Rigid PVC Compound; Chemical formula not applicable (mixture of ingredients)

CHEMICAL FORMULA: Organic Polymer Composite of polyvinyl chloride resin (CAS# 9002-86-2) and functional ingredients

PRODUCT USE: May be molded or extruded into various articles

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

The following substances are present in the product as listed below and identified as hazardous by the OSHA HAZARD Communication Standard. See Section 8 for additional information on ingredients.

COMPONENT NAME	CAS NUMBER	LEVEL IN PRODUCT	OSHA PEL
Vinyl Chloride Monomer	75-01-4	Not more than 10 ppm	1.0 ppm, 8-hr. TWA; 5.0 ppm, STEL
Organotin Stabilizer	Trade Secret	Not more than 4 %	0.1mg/m <sup>3</sup> , TWA as tin
Titanium Dioxide	13463-67-7	0 - 10 %	15 mg/m <sup>3</sup> , 8-hour TWA

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** The product is delivered in the form of a dry powder mix. It can be a slipping hazard if spilled. The product may become airborne during transfer or handling and may present a hazard to respiration. It should be treated as a nuisance particulate (OHSA PEL 15 mg/m<sup>3</sup>, 8-hour TWA) with adequate precautions taken to avoid inhalation or ingestion. Molten plastic can cause severe thermal burns. Burning or overheating PVC compound results in the generation of irritating and toxic vapors including hydrogen chloride, various hydrocarbons and aromatic hydrocarbons, organotins and oxides and decomposition products thereof, carbon dioxide and carbon monoxide. These vapors as well as those produced during normal processing may cause eye, skin, and respiratory tract irritation mainly due to the presence of hydrogen chloride or hydrochloric acid. Fumes generated during processing or burning may condense on cooler surfaces. This condensate may be irritating to skin, eyes, and gastrointestinal tract.

### POTENTIAL HEALTH EFFECTS:

Eye: Product may cause injury or irritation due to mechanical action. Eyes may be irritated by fumes from burning or processing.

Skin: Product is unlikely to cause skin irritation. Fumes from processing or burning may irritate skin. Molten plastic can cause severe thermal burns.

Inhalation: Not expected to be acutely toxic. Given the absence of specific toxicological studies, precautions should be taken to protect against inhalation. Inhalation of fumes from burning or processing can result in irritation of the respiratory tract, which may be severe in the case of over-exposure.

Ingestion: Not expected to be acutely toxic. Precautions should be taken to prevent ingestion given the absence of specific toxicological studies.

## 4. FIRST AID MEASURES

**EYES:** Remove contact lenses at once. Immediately flush eyes with a generous amount of water or normal saline for at least 20 min. If irritation persists, continue flushing and seek medical attention.

**SKIN:** Wash any irritation with soap and water. Seek medical attention if burn or rash occurs or irritation persists.

**INGESTION:** Seek medical attention if swallowed. Not expected to be acutely toxic.

**INHALATION:** For inhalation of product or of fumes and vapors from processing or burning including pyrolysis, remove victim from source of vapors and provide fresh air. Seek medical attention.

**THERMAL BURNS:** Cool skin rapidly with water. Seek medical attention.

## 5. FIRE FIGHTING MEASURES

Flammability properties for this compound have not been established. Rigid PVC compounds will burn if exposed to external sources of heat. In general, rigid PVC compounds will not sustain combustion without exposure to heat from another source. Molten PVC can sustain pyrolysis and ignite nearby flammable material.

**EXTINGUISHING MEDIA:** Water spray, foam, carbon dioxide, or dry chemical. Water is best due to cooling effect.

**HAZARDOUS COMBUSTION PRODUCTS:** Upon combustion or pyrolysis, PVC compounds evolve hydrogen chloride, carbon monoxide, carbon dioxide, various hydrocarbons and aromatic hydrocarbons, and other toxic gases accompanied by dense black smoke.

**FIRE FIGHTING INSTRUCTIONS:** Use NIOSH approved, self-contained pressure demand breathing apparatus and protective clothing. Continue cooling with water after fire is out to prevent pyrolysis and evolution of hazardous decomposition products.

## 6. ACCIDENTAL RELEASE MEASURES

**SPILL RESPONSE:** Sweep, scoop, or vacuum and remove spilled material. Dispose of waste according to local, state, and federal regulations. See Section 13.

## 7. HANDLING AND STORAGE

**HANDLING:** Product is delivered as a dryblended powder compound. Appropriate engineering controls and personal protective equipment should be used to minimize contact with powder. Precautions should be taken to prevent electrostatic discharge, which can occur during pneumatic transfer.

**STORAGE:** The product is shipped in paper bags, polylined boxes, polylined steel tank cars, and hopper trucks. Any vessels used to store the product should be grounded to prevent buildup of electrostatic charge and polylined to prevent contamination. Store in a dry place away from sources of excessive heat.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Provide a continuous supply of fresh air to the workplace as well as local and general exhaust ventilation to remove processing fumes. Avoid skin contact with and treat as hazardous any condensed vapors in exhaust hoods and ducts. All metal surfaces contacting the molten polymer should be stainless steel or surface treated to prevent corrosion and interaction with PVC that can lead to evolution of hazardous decomposition products.

### PERSONAL PROTECTION:

**EYES/FACE:** Safety glasses with side shields to avoid product contact with eyes (mechanical or burn injury)

**SKIN:** To protect against burns from hot molten polymer, wear thermal gloves, long sleeves and long pants.

**RESPIRATORY PROTECTION:** In the event of thermal decomposition, use NIOSH approved full-face acid gas respirator to protect against decomposition products. Use NIOSH approved particulate respirator to protect against over-exposure to nuisance dusting.

**EXPOSURE GUIDELINES:** The exposure limits listed below are for the components in pure form. Refer to Section 2 for component levels in this product.

COMPONENT	OSHA PEL	ACGIH TLV	CARCINOGENICITY
Vinyl Chloride	1.0 ppm, 8-hour TWA 5.0 ppm, 15 min. STEL	5.0 ppm, 8-hour TWA	NTP: Group 1; known to be carcinogenic OSHA: Cancer Suspect Agent IARC: Category 1; carcinogenic to humans
Organotin compounds	0.1 mg/m <sup>3</sup> as tin	0.1 mg/m <sup>3</sup> as tin TWA 0.2 mg/m <sup>3</sup> as tin STEL	
Titanium Dioxide	15 mg/m <sup>3</sup> , 8-hour TWA	10 mg/m <sup>3</sup> , 8-hour TWA	

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	Free-flowing granular solid	<b>PHYSICAL STATE:</b>	Solid
<b>ODOR:</b>	Characteristic mild odor	<b>SPECIFIC GRAVITY:</b>	1.38-1.60
<b>MELTING POINT:</b>	Softens gradually with increasing temperature	<b>WATER SOLUBILITY:</b>	Insoluble
<b>OTHER DATA:</b>	Other physical and chemical data has not been developed or is not applicable		

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable under normal and anticipated storage conditions

**CONDITIONS TO AVOID:** Avoid prolonged heating at processing conditions, temperatures above 400° F, and excessive shear/heat combinations. These conditions will result in the generation of hazardous decomposition products.

**INCOMPATIBILITY:** Incompatible with acetal or acetal copolymers. Melt mixing of PVC and acetal polymers will result in the immediate generation of extremely hazardous decomposition products. Purge processing equipment thoroughly with acrylic, ABS, or polystyrene before introducing PVC into equipment used to process acetal polymers and vice versa.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen chloride, carbon dioxide, carbon monoxide, various hydrocarbons and aromatic hydrocarbons, organotins, and other tin compounds

**HAZARDOUS POLYMERIZATION:** Will not occur

**11. TOXICOLOGICAL INFORMATION**

No toxicological information for this specific product is available. Due to the product's physical and chemical properties, no significant toxicological properties or effects are anticipated.

**12. ECOLOGICAL INFORMATION**

No specific ecotoxicological information or chemical fate information is available for this product. Due to the product's physical and chemical properties, no significant ecological effects are expected.

**13. DISPOSAL CONSIDERATIONS**

**SPECIAL INSTRUCTIONS:** Sweep, scoop, or vacuum and remove any spilled or waste material. Recycling of this product is recommended. Determine waste classification prior to disposal and landfill or incinerate in accordance with federal, state, and local requirements any material that cannot be recycled.

**14. TRANSPORT INFORMATION**

<b>DOT HAZARD CLASS:</b>	Not regulated	<b>IMO DESCRIPTION:</b>	Not a dangerous good
<b>ICAO/IATA DESCRIPTION:</b>	Not a dangerous good		

**15. REGULATORY INFORMATION**

**TSCA INVENTORY STATUS:** All of the components of this product are listed on the TSCA Inventory

**16. OTHER INFORMATION**

*All statements, information, and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. As conditions of use are beyond the control of K-Bin, Inc., any and all liability for damage or injury arising as a result of any use of the product or reliance on the information presented herein is expressly disclaimed.*