1. PRODUCT AND COMPANY IDENTIFICATION

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

NAME USED ON LABEL:	**KBD-100093** (May be followed by alphanumeric code denoting color and grade)
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^3, TWA as tin
Titanium Dioxide	13463-67-7	0 - 10 %	15 mg/m^3, 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^3, 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. Precautions should be taken to protect against inhalation in the absence of specific toxicological studies. 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 protect against ingestion in 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

Flammable 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^3 as tin	0.1 mg/m^3 as tin TWA 0.2 mg/m^3 as tin STEL	
Titanium Dioxide	15 mg/m^3, 8-hour TWA	10 mg/m^3, 8-hour TWA	

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Free-flowing granular solid	**PHYSICAL STATE:**	Solid
ODOR:	Characteristic mild odor	**SPECIFIC GRAVITY:**	1.38-1.60
MELTING POINT:	Softens gradually with increasing temperature	**WATER SOLUBILITY:**	Insoluble
OTHER DATA:	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

DOT HAZARD CLASS:	Not regulated	**IMO DESCRIPTION:**	Not a dangerous good
ICAO/IATA DESCRIPTION:	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

Supercedes: Rev. 1, issued 1 AUG 2000
Revision Summary:

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.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland P.O. Box 2219 Columbus, OH 43216	Regulatory Information Number Telephone Emergency telephone	1-800-325-3751 614-790-3333 1-800-ASHLAND (1-800-274-5263)

Product name	TPE 3065 NAT 2070 BK S&P
Product code	575020
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: solid

CAUTION! MAY BE HARMFUL IF INHALED. DUST MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. CONTACT WITH HOT PRODUCT WILL CAUSE THERMAL BURNS.

Potential Health Effects

Routes of exposure
Inhalation, Skin contact, Eye Contact

Eye contact
Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Molten material causes thermal burns.

Skin contact
Unlikely to cause skin irritation or injury. Molten material causes thermal burns. This material is unlikely to pass into the body through the skin.

Ingestion
Swallowing this material is not likely to be harmful.

Inhalation
This material is a dust or may produce dust. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large

amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:, irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

Carbon black has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. It is listed as a carcinogen by The International Agency for Research on Cancer (IARC). Epidemiological studies of the incidence of cancer, cardiovascular or respiratory disease in workers in the carbon black producing industry have shown no significant health effects due to occupational exposure to carbon black.

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

Other information

Thermal processing of this product can produce fumes and/or vapors. Components of these releases may vary with processing times and temperatures and therefore specific composition cannot be predicted. These fumes and/or vapors may produce eye, skin and/or respiratory tract irritation. With repeated and prolonged exposure at high concentrations, these fumes and/or vapors could cause central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
CARBON BLACK	1333-86-4	>=15-<20%

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention. If eye contact with molten material occurs, hold eyelids apart and flush eyes gently with cool water. Seek immediate medical attention.

Skin

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. If skin contact with molten material occurs, flush exposed area with cool water. Do not forcibly remove material adhering to the skin. Seek immediate medical attention.

Ingestion

First aid is not normally required. If symptoms develop, seek medical attention.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.
Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Foam, Carbon dioxide (CO2), Dry chemical

Hazardous combustion products

May form:, carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for fire-fighting

No special fire hazards are known to be associated with this product.Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Plastic pellets may present a slipping hazard when spilled on walking surfaces.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Shovel material into containers. Thoroughly sweep area of spill to clean up any residual material. Sweep up material for disposal or recovery.

7. HANDLING AND STORAGE

Handling

No adverse health effects are anticipated from the product at room temperature. However, at process temperatures, the product can emit fumes and vapors which may cause irritation of the eyes and respiratory tract. Any exposure will depend upon processing technique and temperature, volume processed and the effectiveness of exhaust ventilation provided for the process. Effects of chronic exposure to off-gases at processing temperatures have not been fully evaluated. Generally, flame retardant additives and pigment additives are encapsulated in an impervious plastic matrix. These additives are not expected to present a hazard. Mechanical handling equipment can cause formation of dusts. Maintain good housekeeping. Dust layers should not be permitted to accumulate in order to avoid any potential for dust explosion hazards. Do not mix thermoplastic rubber with acetal resins, halogenated polymers or reactive phenolic resins at elevated temperatures. Pellets may build up static electricity when being transferred from one container to another.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

CARBON BLACK		1333-86-4
ACGIH	time weighted average	3.5 mg/m3
NIOSH	Recommended exposure limit (REL):	3.5 mg/m3

NIOSH	Recommended exposure limit (REL):	0.1 mg/m3
OSHA Z1	Permissible exposure limit	3.5 mg/m3
OSHA Z1A	time weighted average	3.5 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	3.5 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Eye protection

Wear safety glasses in compliance with OSHA regulations. (Consult your safety representative.)

Skin and body protection

Wear normal work clothing covering arms and legs.
Other protective equipment: Consult your safety products supplier for proper protective equipment to use for thermal processing operations.

Respiratory protection

If overexposure has been determined or documented, a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	solid
Form	No data
Colour	No data
Odour	No data
Boiling point/boilingrange	No data

pH	No data
Flash point	No data
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	No data
Vapour density	No data
Density	No data
	No data
Solubility	No data
Partition coefficient: n-octanol/water	No data
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Incompatible products

Avoid contact with:, strong acids, strong oxidizing agents

Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide, various hydrocarbons

Hazardous reactions

Decomposition of halogenated polymers and reactive phenolic resins may be accelerated when they are in contact with thermoplastic rubber at processing temperatures., Product will not undergo hazardous polymerization., Thermoplastic rubber reacts with acetal resins at temperatures of 425 degrees F (218 degrees C) and above, resulting in decomposition of the resin and releasing formaldehyde as a decomposition product.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

CARBON BLACK	LD 50 Rat: > 15,400 mg/kg

Acute inhalation toxicity

Acute dermal toxicity

CARBON BLACK	LD 50 Rabbit: > 3 g/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish
No data

Acute Toxicity to Aquatic Invertebrates
No data

Environmental fate and pathways
No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
WARNING! This product contains a chemical known in the State of California to cause cancer.
CARBON BLACK
VINYL CHLORIDE MONOMER

SARA Hazard Classification Acute Health Hazard
Chronic Health Hazard

SARA 313 Component(s)

	Health	Flammability	Reactivity	Other
HMIS	1*	1	0	
NFPA	1	1	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).