

SAFETY DATA SHEET

Section 1. Identification

TKB Product Name TKB Product Code : Pearl White : KL-202

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

Identified uses Colorants for industrial use cosmetic ingredient

Distributor:

TKB Trading, 939 E 11th St, Oakland CA, 94606 www.tkbtrading.com support@tkbtrading.com

Emergency telephone number (with hours of operation)

+1 (800) 424-9300 (U.S.) (24 hours) +1 (703) 527-3887 (International) (24 hours)

Section 2. Hazards identification **OSHA/HCS** status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. **Classification of the** : Not classified. substance or mixture **GHS label elements** Signal word : No signal word. **Hazard statements** : No known significant effects or critical hazards. **Precautionary statements** Prevention : Not applicable. Response : Not applicable. Storage : Not applicable. Disposal : Not applicable. Hazards not otherwise : None known. classified

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

Ingredient name	CAS number	%
Mica titanium dioxide	12001-26-2 13463-67-7	50 - 80 20 - 25
	10400-01-1	20 - 25

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present 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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Remove contact lenses, if present and easy to do. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
Inhalation	 If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser.
Ingestion	: Keep person warm and at rest. Wash out mouth with water. If swallowed, drink plenty of water. Do not induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health	<u>effects</u>
Eye contact	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: metal oxide/oxides

Section 5. Fire-fighting measures

Special protective actions	: Promptly isolate the scene by removing all persons from the vicinity of the incident if
for fire-fighters	there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Remarks	: not flammable
	not explosive

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures	
For non-emergency personnel	: Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and cleaning up		
Small spill	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.	
Large spill	: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Precautions for safe handling	1
Protective measures	: Avoid breathing dust. Put on appropriate personal protective equipment (see Section 8). Comply with the health and safety at work laws.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Do not reuse container. See Section 10 for incompatible materials before handling or use.
Remarks:	: not flammable

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits		
Mica titanium dioxide	 OSHA PEL 1989 (United States, 3/1989). TWA: 3 mg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 3/2019). TWA: 3 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2016). TWA: 3 mg/m³ 10 hours. Form: Respirable fraction OSHA PEL Z3 (United States, 6/2016). TWA: 20 mppcf 8 hours. ACGIH TLV (United States, 3/2019). TWA: 10 mg/m³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 5/2018) 		
Appropriate engineering controls	 OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to know worker expression or enterminents below any recommended or statutor. 		
Environmental exposure controls	 to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. 		
ndividual protection meas	res		
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.		

	Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Respirator selection must

be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance		
Physical state	:	Solid. [Powder.]
Color	:	Off-white.
Odor	:	Odorless.
Odor threshold	:	Not applicable.
рН	:	6 to 10.5 [Conc. (% w/w): 4%]
Melting point	:	>1000°C (>1832°F)
Boiling point	:	Not applicable
Flash point	:	Not applicable.
Evaporation rate	:	Not tested
Flammability (solid, gas)	:	not flammable
Lower and upper explosive (flammable) limits	:	Not tested
Vapor pressure	:	Not available.
Vapor density	:	Not tested
Relative density	:	3
Solubility	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	:	Not applicable.
Viscosity	:	Absolute Viscosity (room temperature) (cP):: Not applicable.
VOC		
VOC % by W/W	:	0.0
VOC % by V/V	:	0.0
VOC Lbs./Gallon	:	0.0
VOC Lbs./Gallon without Water and exempt solvents	:	0.0
Bulk density	:	140 kg/m3
Self heating ability		It is not a substance capable of spontaneous heating.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Pearl White	LD50 Oral	Rat	>5000 mg/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	: Virtually nontoxic after a single in			

statement has been derived from the properties of the individual components. Virtually nontoxic after a single skin contact.

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure	Observation
Pearlwhite	Eyes - non-irritant	Rabbit	-	-
	Skin - non-irritant	Rabbit	-	-
titanium dioxide	Eyes - non-irritant	Rabbit	-	-
	Skin - Mild irritant	Human	72 hours 300 ug l	-
	Skin - non-irritant	Rabbit	-	-

Conclusion/Summary

Skin

: The product has not been tested. The statement has been derived from substances/ products of a similar structure or composition.

 The product has not been tested. The statement has been derived from substances/ products of a similar structure or composition.

Sensitization

Product/ingredient name	Route of exposure		pecies	Result
Pearlwhite	skin	G	uinea pig	Not sensitizing
titanium dioxide	skin	N	louse	Not sensitizing
Conclusion/Summary				
Skin	: The cher	nical struc	ture does not suggest a ser	sitizing effect.
<u>Mutagenicity</u>				
The product has not been test	ted.			
Conclusion/Summary			ture does not suggest a spe g mutagenic activity.	cific alert for such an effect. No data was
Carcinogenicity				
The product has not been test	ted.			
<u>Classification</u>	no adver	se health e		perience and the information available, led as recommended with suitable
Product/ingredient name	OSHA	IARC	NTP	
titanium dioxide	-	2B	-	
Reproductive toxicity				
The product has not been test	ted.			
Conclusion/Summary	: No reliab	le data are	e available concerning repro	duction toxicity.
Teratogenicity				
The product has not been test	ted.			
Conclusion/Summary	: No reliab	le data wa	s available concerning terat	ogenicity.
Specific target organ toxicity			Ŭ	
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Section 11. Toxicological information

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	Not available.	
Potential acute health effects		
Eye contact	Exposure to airborne concentrations above statutory or recommended exposure limay cause irritation of the eyes.	mits
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limeter may cause irritation of the nose, throat and lungs.	mits
Skin contact	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Symptoms related to the phy	cal, chemical and toxicological characteristics	
Eye contact	Adverse symptoms may include the following: irritation redness	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	No specific data.	
Ingestion	No specific data.	
-	and also chronic effects from short and long term exposure	
<u>Short term exposure</u> Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff	<u>s</u>	
Conclusion/Summary	Prolonged or repeated exposure may cause pulmonary problems. The product has been tested. The statement has been derived from the properties of the individual components.	
General	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.	
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Teratogenicity	No known significant effects or critical hazards.	
Developmental effects	No known significant effects or critical hazards.	

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
Pearlwhite	Acute LC50 >100 mg/l	Fish	96 hours
titanium dioxide	Acute EC50 >1000 mg/l	Aquatic invertebrates Daphnia magna	48 hours
	Acute EC50 >61 mg/l	Aquatic plants - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 >1000 mg/l	Micro-organism - activated sludge of a predominantly domestic sewag	3 hours
	Acute LC50 >1000 mg/l	Fish - Fundulus heteroclitus	96 hours
	Chronic EC10 >12.7 mg/l	Aquatic plants - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 100000 mg/kg	Aquatic invertebrates aquatic crustacea	28 days

Persistence and degradability

The product has not been to	ested.
Conclusion/Summary	: The colourant is insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plant

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
titanium dioxide	-	19 to 352	low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

:

TSCA 8(b) inventory

: Exempt or listed on the active inventory.

U.S. Federal regulations

<u>SARA 313</u>

	Product name	CAS number	%
Supplier notification	None identified.		
Toxics in Packaging (CONEG)	: In compliance.		
State regulations			
Massachusetts	: The following components are listed: Mica (12001	-26-2), titanium dio	xide (13463-67-7)
New York	:		
New Jersey	: The following components are listed: Mica (12001	-26-2), titanium dio	xide (13463-67-7)
Pennsylvania	: The following components are listed: Mica (12001	-26-2), titanium dio	xide (13463-67-7)
Canada inventory	: All components are listed or exempted.		
International regulations			
International lists	 Australia inventory (AIIC): All components are list China inventory (IECSC): All components are list Japan inventory (CSCL): All components are list Korea inventory (KECI): All components are liste this product are exempted and not subject to regis New Zealand Inventory of Chemicals (NZIoC): A exempted. Philippines inventory (PICCS): All components are Taiwan Chemical Substances Inventory (TCSI) exempted. / Please contact your local supplier. Turkey inventory: All components are listed or exempted. 	ted or exempted. ed or exempted. d or exempted. / A stration. All components are are listed or exemp : All components a	e listed or ted.
	Europe Inventory: Please contact your supplier to	o get the informatio	on.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

motory	
Date of issue/Date of revision	: 11/23/2022
Date of previous issue	: 4/27/2022
Version	: 2
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

HE110A

History

VOLATILE CHEMICALS REPORT

		US EPA Designate
A. Product De	nsity:	
1.) 3 g/cr	n³ (25.036 lbs/gal)	=(Dc)s
B. Nonvolatile	Content:	
1.) 1	00.0 Weight percent of nonvolatiles in product	=(Wn)s
2.) 1	00.0 Volume percent of nonvolatiles in product	=(Vn)s
3.) 2	5.02 Density, lb nonvolatiles/gal nonvolatiles	=(Dn)s
C. Volatiles:		
1.)	0.0 Weight percent of total volatiles in product	=(Wv)s
2.)	0 Density, lb volatiles/gal volatiles	=(Dv)s
D. Water Cont	tent:	
1.)	0.0 Weight percent of water in product	=(Ww)s
2.)	0.0 Volume percent of water in product	=(Vw)s
E. Volatile Org	ganic Compounds, (VOCs):	
1.)	0.0 Weight percent of organic volatiles in product	=(Wo)s
2.)	0.0 Volume percent of organic volatiles in product	=(Vo)s
3.)	0 Density, lb organic volatiles/gal organic volatiles	=(Do)s
4.)	0.0 Weight percent of VOCs in total volatiles	=(Wo)v
5.)	0.0 Volume percent of VOCs in total volatiles	=(Vo)v
F. VOC Conte	nt in Product Expressed in Other Terms:	
1.) a.)	0.0 lb VOC / gal Product	
1.) b.)	0 grams VOC / liter Product	
2.) a.)	0.0 lb VOC / gal Product less water & exempt solvent	
2.) b.)	0 grams VOC / liter Product less water & exempt solvent	
2.) c.)	0.0 Weight percent of organic volatiles (VOC) in Product less water & exempt solvents.	
3.)	0.0 lb VOC / gal total nonvolatiles	

G. Volatiles

Chemical name

Other VOCs (Non-HAPs)

NOTE:

The US EPA definition of VOC does not include water, ammonia or other exempt substances. The VOC values reported are based on current formulations and supplier data.

This report also serves as a Certified Product Data Sheet (CPDS) as defined by 40 CFR 63 National Emissions Standard for HAPS, Subpart KK for the Printing Industry