Material Safety Data Sheet

Royal Gold, Mica Powder #303

Product Code: PM-000225
Department: mica dry pigments
C.A.S.: 12001-26-2, 1309-37-1, 18282-10-5

Section: 1 Identification

Product name	Royal Gold, Mica Powder #303
Material use	colouring agent

Section: 2 Hazard Identification

GHS-Labeling	Not a dangerous substance according to GHS.
Other hazards	None known.

GHS Label Elements

Signal Word

GHS Classification

Hazard Statements

Precautionary Statements

P260 Do not breathe dust.

Section: 3 Composition / Information on Ingredients

Chemical nature: Mica coated with: titanium dioxide, ferric oxide, tin oxide

Hazardous ingredients

CAS #.	Chemical Name	Concentration
12001-26-2	mica (muscovite)	>= 30 % - < 50 %
1309-37-1	Diiron trioxide	>= 10 % - < 30 %
18282-10-5	Tin dioxide	>= 1 % - < 5 %

Exact percentages are being withheld as a trade secret.

Section: 4 First-Aid Measures

Description of first-aid measures	
Inhalation	
After inhalation	fresh air.
Skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Eye contact	
After eye contact:	rinse out with plenty of water.
Ingestion	
After swallowing:	make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person.
Most important symptoms and effects both acute and delayed :	We have no description of any toxic symptoms.
Indication of any immediate medical attention and special treatment needed:	No information available

Section: 5 Fire-Fighting Measures

Extinguishing media	
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Not combustible. Ambient fire may liberate hazardous vapors.
Advice for firefighters	
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing apparatus.

Section: 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	
Advice for non-emergency personnel:	Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders:	Protective equipment see section 8.
Environmental precautions	No special precautionary measures necessary.
Methods and materials for containment and cleaning up	Observe possible material restrictions (see sections 7 and 10).Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Section: 7 Handling And Storage

Precautions for safe handling:	Observe label precautions.
Conditions for safe storage:	Tightly closed. Dry.
Storage temperature:	no restrictions.

Section: 8 Exposure Control/Personal Protection

Exposure limit(s)
Ingredients

Basis	Value	Threshold limits	Form of exposure
General threshold limit value for dust			
Z1A	Time Weighted Average (TWA)	5 mg/m³	Respirable fraction.
	Time Weighted Average (TWA)	15 mg/m³	Total dust.
	TWA	50millions of particles per cubic foot of air	Total dust.
	TWA	15millions of particles per cubic foot of air	Respirable fraction.
	TWA	15 mg/m³	Total dust.
	TWA	5 mg/m³	Respirable fraction.
OSHA_TRANS	PEL	5 mg/m³	Respirable fraction.
	PEL	15 mg/m³	Total dust.
ACGIH			
	TWA	10 mg/m³	Inhalable particles.
	TWA	3 mg/m³	Respirable particles.
mica (muscovite) 12001-26-2			
ACGIH	TWA	3 mg/m³	Respirable fraction.
NIOSH/GUIDE	Recommended exposure limit (REL)	3 mg/m³	Respirable.
Z1A	TWA	3 mg/m³	Respirable dust.
	TWA	20millions of particles per cubic foot of air	
Diiron trioxide 1309-37-1			
ACGIH	TWA	5 mg/m³	Respirable fraction.
NIOSH/GUIDE	Recommended exposure limit (REL)	5 mg/m³	Dust and fume. Expressed as: Fe
OSHA_TRANS	PEL	10 mg/m³	Fume.
Z1A	TWA	10 mg/m³	Fume.
Tin dioxide 18282-10-5			
ACGIH	TWA	2 mg/m³	Expressed as: Sn
NIOSH/GUIDE	REL	2 mg/m³	Expressed as: Sn

Engineering measures	Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
Individual protection measures	Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.
Hygiene measures	Change contaminated clothing. Wash hands after working with substance.
Eye/face protection	Safety glasses
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.
Respiratory protection	required when dust is generated.

Section: 9 Physical and Chemical Properties

Physical state	powder
Color	yellow
Odor	odorless
Odor Threshold	Not applicable
pH	6 - 9 at 100 g/l 20 ºC (20 ºC) (slurry)
Melting point	No information available.
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	The product is not flammable.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	3.36 - 4.76 g/cm3 at 22 - 23 ºC (22 - 23 ºC) Method: OECD Test Guideline 109
Relative density	No information available.
Water solubility	at 20 ºC (20 ºC) insoluble
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Bulk density	290 - 320 kg/m3
Particle size	10 - 60 µm

Section: 10 Stability And Reactivity

Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	no information available
Conditions to avoid	no information available
Incompatible materials	no information available
Hazardous decomposition products	no information available

Section: 11 Toxicological Information

Likely route of exposure	Inhalation, Eye contact, Skin contact, Ingestion
Target Organs	Eyes Skin Respiratory system
Specific target organ systemic toxicity	
single exposure	The substance or mixture is not classified as specific target organ toxicant, single exposure.
repeated exposure	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	Regarding the available data the classification criteria are not fulfilled.
Carcinogenicity	
IARC	Group 2B: Possibly carcinogenic to humans Rutile 1317-80-2
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Further information :	The results of animal experiments using pigments of this type indicate no toxicologically relevant properties. Since the substance is poorly absorbed, no hazardous properties are to be anticipated. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions. The individual test results were as follows: skin tolerance (rabbit): no irritant effect; eye irritation test (rabbit): no irritant effect; sensitization test (guinea pig): no sensitizing potential. LD##$_0$(oral, rat): not determinable; all animals still alive after 15,000 mg/kg. Subchronic toxicity (rat): no appreciable findings up to 50 000 ppm. Chronic toxicity (rat): 5 % of the product added to the feed for a period of 2.5 years did not show any toxicological changes or carcinogenic effects in animals. LC_{50} (inhalational, rat): male animals: between 4.6 and 14.9 mg/l air; female animals: > 14.9 mg/l air. The product did not show any genotoxic effects in the micronucleus test carried out in rats in concentrations of up to 2000 mg/kg (limit test). Handle in accordance with good industrial hygiene and safety practice.

Ingredients

mica (muscovite)

No information available.

Diiron trioxide

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Result: negative

(Lit.)

Tin dioxide

Acute oral toxicity

LD50 Rat: > 20,000 mg/kg (RTECS)

Section: 12 Ecological Information

Ecotoxicity	No information available.
Persistence and degradability	No information available.
Bioaccumulative potential	
Partition coefficient: n-octanol/water	Not applicable
Mobility in soil	No information available.
Ingredients	
Diiron trioxide	No information available.
mica (muscovite)	No information available.

Section: 13 Disposal Considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section: 14 Transport Information

Land transport (DOT)	Not classified as dangerous according to transport regulations.
Air transport (IATA)	Not classified as dangerous according to transport regulations.
Sea transport (IMDG)	Not classified as dangerous according to transport regulations.

Section: 15 Regulatory Information

SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
Clean Water Act	This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
US State Regulations	
Massachusetts Right To Know	
Ingredients	Diiron trioxide mica (muscovite) Tin dioxide
Pennsylvania Right To Know	
Ingredients	Diiron trioxide mica (muscovite) Rutile
New Jersey Right To Know	
Ingredients	Diiron trioxide mica (muscovite) Tin dioxide
California Prop 65 Components	WARNING: this product contains a chemical known in the State of California to cause cancer. Ingredients rutile
Notification status	
TSCA:	All components of the product are listed in the TSCA-inventory.
DSL:	All components of this product are on the Canadian DSL

Section: 16 Other Information

Training advice	Provide adequate information, instruction and training for operators.
Labeling	
Precautionary Statements	P260 Do not breathe dust.
reference	manufacturer's material safety data sheet
prepared by	Kama pigments

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