

Material Safety Data Sheet

Modern, Natural, Versatile.
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Section 1. Product

Product Name **Fine Saffron**

Effective Date **5/11/2018**

Print Date **5/11/2018**

Material Uses **Cosmetic Pigments**

Chemical Family **Inorganic pigment.**

Section 2. Composition and Information on Ingredients

Component	% in Weight
TITANIUM DIOXIDE	42-52
MICA (mineral)	36-52
IRON OXIDE	6-12

Section 3. Hazards Identification

Physical State and Appearance **Solid. (Red-gold, odorless, lustrous powder)**

Emergency Overview **MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.**

Routes of Entry **Eye contact. Inhalation. Ingestion (not anticipated).**

Potential Acute Health Effects

Eyes May cause eye irritation. Symptoms include: Itching and redness after contact.

Skin May cause mild skin irritation. Symptoms include: itching and redness after contact.

Inhalation May cause respiratory tract irritation. Symptoms include: coughing, wheezing or shortness of breath when inhaled.

Ingestion Not an intended route of exposure. May be hazardous in case of ingestion. Symptoms include: gastrointestinal tract upset and diarrhea.

Potential Chronic Health Effects

Additional information See Toxicological Information (section 11)

Medical Conditions Aggravated by Overexposure: **Repeated or prolonged Inhalation of any dust particulate may aggravate respiratory medical conditions.**

Continued on Next Page

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If symptoms persist, seek medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reusing. Thoroughly clean shoes before reuse. If symptoms develop, seek medical attention.
inhalation	If inhaled remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. if symptoms persist, seek medical attention.
Ingestion	Do not ingest. If this material is swallowed, call a physician immediately. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Flammability of the Product	Non-flammable.
Eire Fighting Media and Instructions	In case of fire, use water spray (fog), foam, dry chemical, or 002.
Protective Clothing (Fire)	Wear self-contained breathing apparatus and full protective clothing.

Section 6. Accidental Release Measures

Small Spill and Leak	Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container.Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional regulatory requirements.
Large Spill and Leak	Use appropriate tools to put the spilled material into a labeled waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional regulatory requirements. Check TLV in Section 8 of MSDS and with local authorites.
Spill Kir Information	No specific spill kit required for this product.

Section 7. Handling and Storage

Handling	Avoid generating dust. Avoid breathing dust. Use only with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Keep container closed. Wash thoroughly after handling.
Storage	Keep container dry. Keep containers sealed until ready for use.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	<div>Eyes Safety glasses.</div> <div>Body Lab coat.</div> <div>Respiratory Dust mask. Use additional appropriate respiratory protection if there is the potential to exceed the exposure limit(s).</div> <div>Hands Recommended: Gloves.</div> <div>Feet Not applicable.</div>

Protective Clothing
(Pictograms)



Personal Protection in Case of Large Spill: Splash goggles, Synthetic apron, Gloves. Wear **MSMA/NIOSH** approved self-contained breathing apparatus or equivalent and full protective gear.

Product Name	Exposure Limits
TITANIUM DIOXIDE	ACGIH (United States, 1994). TWA: 5 mg/m ³ 8 hour(s). OSHA Final Rule (United States, 1989). TWA: 10 mg/m ³ 8 hour(s). Form: Total dust ACGIH (United States, 1994). TWA: 3 mg/m ³ OSHA (United States, 1939). Notes: Respirable TWA: 3 mg/m ³ ACGIH (United States, 1994). TWA: 3 mg/m ³ 8 hour(s). NIOSH REL (United States, 1994). TWA: 3 mg/m³ 10 hour(s). Form: Respirable fraction OSHA Final Rule (United States, 1989). TWA: 3 mg/m ³ 8 hour(s). Form: Respirable dust ACGIH (United States, 1994). TWA: 5 mg/m ³ OSHA (United States, 1989). Notes: Total STEL: 10 ppm ACGIH (United States, 1997). TWA: 10 mg/m ³ 8 hour(s). TWA: 5 mg/m ³ 8 hour(s). Form: Dust and fumes NIOSH REL (United States, 1994). TWA: 5 mg/m ³ 10 hour(s). Form: Dust and fumes OSHA Final Rule (United States, 1989). STEL: 10 ppm 15 minutes. Form: Total particulates
MICA (mineral)	
IRON OXIDE	

Section 9. Physical and Chemical Properties

Odor	Odorless.
Color	Red-gold
Physical State and Appearance	Solid. (Red-gold, odorless, lustrous powder)
Molecular Weight	Mixture.
Molecular Formula	Not applicable.
pH	6 to 11 (Conc. % w/w): 10)
Melting/Freezing Point	Not available.
Specific Gravity	Not applicable.
Density	Bulk Density 3.1 to 4.1 g/in³
Solubility	Insoluble in water.

Fine Saffron

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Hazardous Decomposition Products	Not applicable.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological information

RTECS Number:	Titanium Dioxide Mica (mineral) Iron Oxide	XR2275000 8760000 N07400000
Toxicity	Acute oral toxicity (LD50): >16000 mg/kg [Rat].	
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Classified None by NIOSH [TITANIUM DIOXIDE]. Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [TITANIUM DIOXIDE]. Classified None by NIOSH [IRON OXIDE]. Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human) by IARC [IRON OXIDE]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure to the substance at concentrations above exposure limits may cause respiratory damage. Target Organs: eyes, lungs, skin.	
Acute Effects on Humans	May cause skin, eye and respiratory irritation.	
Sensitization	Repeated or prolonged exposure to the substance at concentrations above the exposure limits may cause respiratory tract and lung sensitization.	
Carcinogenic EJTccis	This material is not known to cause cancer in animals or humans.	

Section 12. Ecological information

Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
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Section 13. Disposal Considerations

EPA Waste Number	Non-hazardous waste
Treatment	Dispose of according to all federal, state and local regulations.

Section 14. Transport Information

POT Classification	Not regulated.
TDG Classification	Not regulated.
IMO/OVTDG Classification	Not regulated.
ICAO/IATA Classification	Not regulated.

Section 5. Regulatory Information

U.S. Federal Regulations

TSCA (b) inventory: TITANIUM DIOXIDE; MICA (mineral); IRON OXIDE

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 *emergency planning and notification*: No products were found.

SARA 302/304/311/312 hazardous chemicals TITANIUM DIOXIDE; MICA (mineral); IRON OXIDE

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: TITANIUM DIOXIDE: Immediate (Acute) Health Hazard; MICA (mineral): Immediate (Acute) Health Hazard; IRON OXIDE: Immediate (Acute) Health Hazard

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada)

Not controlled under WHMIS (Canada).

CERA DSL: TITANIUM DIOXIDE; MICA (mineral); IRON OXIDE

International Regulations

EINECS

TITANIUM DIOXIDE	236-675-5
MICA (mineral)	3101276
IRON OXIDE	215-168-2

DSCL (EEC)

S22- Do not breathe dust.

International Lists

Australia (NICNAS): TITANIUM DIOXIDE; MICA; IRON OXIDE

Japan (MITI): TITANIUM DIOXIDE; MICA; IRON OXIDE

Korea (TCCL): TITANIUM DIOXIDE; MICA; IRON OXIDE

Philippines (RA6969): TITANIUM DIOXIDE; MICA; IRON OXIDE

State Regulations

Pennsylvania RTK TITANIUM DIOXIDE: (generic environmental hazard); IRON OXIDE: (generic environmental hazard)

Massachusetts RTK: TITANIUM DIOXIDE; MICA (mineral); IRON OXIDE

New Jersey: TITANIUM DIOXIDE; MICA (mineral); IRON OXIDE

Section 16. Other information

Hazardous Material
Information System
(U.S.A.)

Fire Hazard	J
Reactivity	0
Personal Protection	E

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

Other Special
Considerations

Not available.

Changed Since Last Revision

Technical Data Sheet

Fine Saffron

Cosmetic Pigment

INCI NAME: Titanium Dioxide (and) Mica (and) Iron Oxides

APPEARANCE: Red-golden lustrous powder

CHEMICAL COMPOSITION:	%
TiO ₂	42. – 52.0
Mica	36. – 52.0
Fe ₂ O ₃	6.1 – 12.0

PARTICLE SIZE: 5.0 – 25.0 μ m (80 % within range)
(Laserbeam Diffraction; Malvern 2000) 7.0 – 14.0 μ m (D50: median size)

pH: 6.0 – 11.0
(0.5 % aqueous dispersion; ISO 787-9)

LOSS ON DRYING: \leq 5 %
(105°C; 2 hours; ISO 787-2)

MICROBIAL PURITY: Total Viable Aerobic Count < 100 CFU/g
(USP, Ph. Eur.)

E. coli	absent in 1 g
Ps. aeruginosa	absent in 1 g
St. aureus	absent in 1 g
Se. species	absent in 1 g
Gram negative bacteria	absent in 1 g
Candida albicans	absent in 1 g

HEAVY METALS: (Modified CTFA and internal methods)

As	< 2 ppm	Hg	< 1 ppm
Be	< 50 ppm	Ni	< 10 ppm
Cd	< 1 ppm	Pb	< 10 ppm
Cr	< 100 ppm	Sb	< 1 ppm
Cu	< 50 ppm	Zn	< 50 ppm

ADDITIONAL DATA:
The following data is included for informational purposes only and is not part of the product specifications.

BULK DENSITY: 3. – 4.1 g/cm³
OIL ABSORPTION: (ASTM D281-84) \leq 70 % g pigment
SHELF LIFE: 5 years

DATE: 05 - 2018