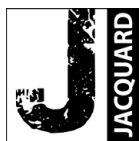


SAFETY DATA SHEET (SDS)



Jacquard Products
Manufactured by Rupert, Gibbon & Spider, Inc.
P.O. Box 425 | Healdsburg, CA 95448
800.442.0455 | Fax: 707.433.4906
www.jacquardproducts.com

Pearl Ex Powdered Pigment - 685 Spring Green - Pg 1

Revision Date: 05/15/18

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	PEARL EX POWDERED PIGMENT	
Product Number/Code:	685 SPRING GREEN	
Recommended Use:	Artist pigment	
Restrictions on use:	None known	
Manufacturer:	Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577	
Emergency Number:	ChemTel, Inc. - Contract #MIS9128344	
	North America: 1-800-255-3924	International: 1-813-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

This product is not considered to be or contain hazardous chemicals based on evaluations made by our company under the OSHA Hazard Communication Standard, reference 29 CFR 1910.1200.	
Toxicological Data on Ingredients:	
Hazard Classification	Not hazardous
Physical Hazards:	Not classified
Health Hazards:	Not classified
Environmental Hazards:	Not classified
Label Elements	
Pictogram:	None
Signal Words:	None
Hazard Statements-EU:	The mixture does not meet the criteria for classification.
Precautionary Statements-EU:	
Prevention:	P260 Do not breathe dust. Provide adequate information, instruction and training for operators.
Response:	See sections 4, 5 & 6
Storage:	See section 7
Disposal:	See section 13
Hazard(s) not otherwise classified:	None known

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature:	Mica coated with: titanium oxide, chromium(III) oxide	
Chemical identity	Content in percent (%)*	CAS #
Mica (muscovite)	>= 30% - < 50%	12001-26-2
Titanium (IV) oxide	>= 50% - < 70%	13463-67-7
Chromium (III) oxide	>= 10% - < 30%	1308-38-9
<i>Exact percentages withheld as a trade secret.</i>		

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
In the event of skin contact:	Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In the event of eye contact:	Rinse out with plenty of water.
In the event of swallowing:	Make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person.
In the event of exposure by inhalation:	Fresh air.
Most important symptoms and effects, 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 - FIREFIGHTING MEASURES

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 fire fighters:	In the event of fire, wear self-contained breathing apparatus.
Further information:	None

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.
Methods and material for containment and clean up:	Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Environmental procedures:	No special precautionary measures necessary.
Reference to other sections:	Protective equipment: see section 8.

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SECTION 7 - HANDLING AND STORAGE

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

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s):			
Basis:	Value:	Threshold limits:	Remarks:
General threshold limit value for dust:			
Z1A	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure: Total dust.
	Time Weighted Average (TWA):	50 millions of particles per cubic foot of air	Form of exposure: Total dust.
	Time Weighted Average (TWA):	15 millions of particles per cubic foot of air	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m ³	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m ³	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m ³	Form of exposure: Respirable fraction.
	PEL:	15 mg/m ³	Form of exposure: Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable particles.
Titanium (IV) oxide I3463-67-7:			
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	
OSHA_TRANS	PEL:	15 mg/m ³	Form of exposure: Total dust.
Z1A	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure: Total dust.
Mica (muscovite) I2001-26-2:			
ACGIH	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable fraction.
NIOSH	Recommended Exposure Limit (REL):	3 mg/m ³	Form of exposure: Respirable.
Z1A	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable dust.
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chromium (III) oxide 1308-38-9:			
NIOSH/GUIDE	Recommended Exposure Limit (REL):	0.5 mg/m ³	Expressed as: as Cr.
OSHA_TRANS	PEL:	1 mg/m ³	Expressed as: as Cr.
	PEL:	0.5 mg/m ³	Expressed as: as Cr.
ZIA	Time Weighted Average (TWA):	1 mg/m ³	
ACGIH	Time Weighted Average (TWA):	0.5 mg/m ³	Expressed as: as Cr.
Control parameters:			
Appropriate engineering controls:		Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.	
Individual protection measures, such as personal protective equipment:			
Hygiene measures:		Change contaminated clothing. Wash hands after working with substance.	
Eye/face protection:		Safety glasses	
Skin protection:		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.	
Hand protection:		Not required.	
Respiratory protection: (required when dusts are generated)		Recommended Filter type: Filter P I (acc. to DIN 3181) for solid particles of inert substances. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.	

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Powder
Color:	Green
Type of Odor:	Odorless
Odor threshold:	Not applicable
Important health, safety and environmental information:	
Initial Boiling Point and Boiling Range:	No information available.
Melting Point/Freezing Point:	No information available.
Flammability Classification:	The product is not flammable.
Flash Point:	Not applicable
Auto-ignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Flammability Limits (lower/upper):	No information available.
Evaporation rate:	No information available.
Vapor Pressure:	No information available.
Vapor Density (Air=1):	3.0 - 3.2 g/cm ³ at 68°F (20°C)
Particle size:	Particle size: 10.0 - 60.0 µm Mean particle size: 18.0 - 25.0 µm
Octanol/Water Partition Coefficient (log Pow):	No information available.
Specific Gravity:	No information available.
Bulk Density:	650 - 700 kg/m ³
Water Solubility:	at 68°F (20°C) practically insoluble
pH:	3.0-6.0 at 100 g/l 68°F (20°C) (slurry)
Viscosity:	No information available.
Explosive Properties:	Not classified as explosive.
Oxidizing Properties:	None
Molecular Formula:	No information available.
Molecular Weight:	No information available.
Relative Density:	No information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	See below.
Stability:	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions:	No information available.
Conditions to avoid:	Not known to date.
Incompatible materials:	No information available.
Hazardous decomposition products:	No information available.

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SECTION II - TOXICOLOGICAL INFORMATION

Information on toxicological effects:		
Acute toxicity (list all possible routes of exposure)		
Acute Oral Toxicity:	Titanium (IV) oxide: LD50 Rat: . 10,000 mg/kg (external SDS) Mica (muscovite): no information available Chromium (III) oxide: LD50 Rat: > 5,000 mg/kg (IUCLID)	
Skin Corrosion/Irritation:	Titanium (IV) oxide: Rabbit - Result: No skin irritation (IUCLID) Mica (muscovite): no information available Chromium (III) oxide: Rabbit - Result: No irritation (IUCLID)	
Serious Eye Damage / Eye Irritation:	Titanium (IV) oxide: Rabbit - Result: No eye irritation (IUCLID) Mica (muscovite): no information available Chromium (III) oxide: Rabbit - Result: No eye irritation (IUCLID)	
Respiratory or Skin Sensitization:	Chromium (III) oxide: Human experience - Result: Negative (Lit.)	
Germ Cell Mutagenicity:	Chromium (III) oxide: Genotoxicity in vivo Mouse - Result: Negative (Lit.)	
Carcinogenicity:	IARC:	Group 2B: Possibly carcinogenic to humans Titanium (IV) oxide 13463-67-7
	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.
Likely route of exposure:	Inhalation, eye contact, skin contact, ingestion	
Target organs:	Respiratory system	
Specific Target Organ Toxicity - single exposure (STOT-se):	The substance or mixture is not classified as specific target organ toxicant, single exposure.	
Specific Target Organ Toxicity - repeated exposure (STOT-re):	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 classified.	
Potential Health Effects:		
Additional Data:	The results of animal experiments using pigments of this type indicate no toxicologically relevant properties, since the substance is poorly absorbed, no systemic effects 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; LD50 (oral, rat): not determinable; all animals still alive after 15,000 mg/kg. Subchronic toxicity (rat): no appreciable findings up to 50,000 ppm.	

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SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
Persistence and degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Titanium (IV) oxide:	Toxicity to fish: LC0 Leuciscus idus (Golden orfe): >1,000 mg/l (external SDS) Toxicity to bacteria: EC0 Pseudomonas fluorescens: > 5,000 mg/l (external SDS)
Mica (muscovite):	No information available
Chromium (III) oxide:	Toxicity to fish: LC0 Leuciscus idus (Golden orfe): >= 1,000 mg/l; 48h (above the solubility limit in the test medium) (IUCLID) Toxicity to bacteria: EC0 E.coli: 1,000 mg/l (external SDS)
Biodegradability:	The methods for determining the biological degradability are not applicable to inorganic substances.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	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

General Information:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
UN number:	Not relevant
UN proper shipping name:	Not relevant
Transport hazard class:	Not relevant
Packing group:	Not relevant
Environmental Hazards:	
Environmentally hazardous substance:	No
Special precautions for user:	Not relevant

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SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
US Regulations	
SARA 313:	The following components are subject to reporting levels established by SARA Title III, Section 313: Chromium (III) oxide (1308-28-9): 13%.
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. Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
DEA List I:	Not listed
DEA List II:	Not listed
US State Regulations	
Massachusetts Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide
Pennsylvania Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide
New Jersey Right-to-Know:	Ingredients: Titanium (IV) oxide, Mica (muscovite), Chromium (III) oxide
California Prop 65 Components:	Used as directed, this product will NOT expose you to chemicals known to cause cancer. Reference to Titanium (IV) oxide is based on unbound respirable particles and is not generally applicable to product as supplied. The Titanium (IV) oxide in Pearl Ex Powdered Pigments is bound to mica, and the particle size is too large to be considered respirable. <i>Ingredients: Titanium (IV) oxide</i>
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

HMIS Hazard ID:	
Health:	No information available
Flammability:	No information available
Reactivity:	No information available
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 05/15/18

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Abbreviations:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	International carriage of Dangerous goods by Road
AICS	Australian Inventory of Chemical Substances
ATE	Acute Toxicity Estimate
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials
BCF	Bioconcentration Factor
BOD5	5-day Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Classification, Labeling and Packaging regulation
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List
EINECS	European Inventory of Existing Chemical Substances
ECL	Existing Chemicals List (Korea)
ENCS	Existing and New Chemical Substances Inventory (Japan)
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.
ERG	Emergency Response Guide
GHS	Globally Harmonized System
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods
LD50	Lethal Dose to 50% of test animal population
MAK	Maximale Arbeitsplatz Konzentration
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit
PICCS	Philippine Inventory of Commercial Chemical Substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemical Substances
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit
SVHC	Substance of Very High Concern
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
VOC	Volatile Organic Compound
WGK	Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System