

# 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 - 691 Solar Gold - Pg 1

Revision Date: 05/15/18

## SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	<b>PEARL EX POWDERED PIGMENT</b>	
Product Number/Code:	<b>691 SOLAR GOLD</b>	
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:	<b>ChemTel, Inc.</b> - Contract #MIS9128344	
	North America: <b>1-800-255-3924</b>	International: <b>1-813-248-0585</b>

## SECTION 2 - HAZARD(S) IDENTIFICATION

<b>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.</b>	
<b>Toxicological Data on Ingredients:</b>	
Hazard Classification	Not hazardous
Physical Hazards:	Not classified
Health Hazards:	Not classified
Environmental Hazards:	Not classified
<b>Label Elements</b>	
Pictogram:	None
Signal Words:	None
<b>Hazard Statements-EU:</b>	The mixture does not meet the criteria for classification.
<b>Precautionary Statements-EU:</b>	
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

<b>Chemical nature:</b>	Mica coated with: titanium dioxide, tin oxide, ferric oxide, silicon dioxide, auxiliaries	
<b>Chemical identity</b>	<b>Content in percent (%)*</b>	<b>CAS #</b>
Mica (muscovite)	>= 30% - < 50%	12001-26-2
rutile	>= 10% - < 30%	1317-80-2
silicon dioxide	>= 10% - < 30%	7631-86-9
Diiron trioxide	>= 10% - < 30%	1309-37-1
<i>Exact percentages withheld as a trade secret.</i>		

## SECTION 4 - FIRST AID MEASURES

<b>Description of first aid measures:</b>	
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

<b>Exposure limit(s):</b>			
Basis:	Value:	Threshold limits:	Remarks:
<b>General threshold limit value for dust:</b>			
Z1A	Time Weighted Average (TWA):	5 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m <sup>3</sup>	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 <sup>3</sup>	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
	PEL:	15 mg/m <sup>3</sup>	Form of exposure: Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m <sup>3</sup>	Form of exposure: Respirable particles.
<b>mica (muscovite) I 2001-26-2:</b>			
ACGIH	Time Weighted Average (TWA):	3 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
NIOSH/GUIDE	Recommended Exposure Limit (REL):	3 mg/m <sup>3</sup>	Form of exposure: Respirable.
Z1A	Time Weighted Average (TWA):	3 mg/m <sup>3</sup>	Form of exposure: Respirable Dust.
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
<b>silicon dioxide 7631-86-9:</b>			
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	6 mg/m <sup>3</sup>	
Z1A:	Time Weighted Average (TWA):	6 mg/m <sup>3</sup>	
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m <sup>3</sup>	The exposure limit is calculated from the equation, 80/(%SiO <sub>2</sub> ), using a value of 100% SiO <sub>2</sub> . Lower values of % SiO <sub>2</sub> will give higher exposure limits.

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## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Diiron trioxide I309-37-1:</b>			
ACGIH:	Time Weighted Average (TWA):	5 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	5 mg/m <sup>3</sup>	Form of exposure: Dust and fume. Expressed as: as Fe
OSHA_TRANS:	PEL:	10 mg/m <sup>3</sup>	Form of exposure: Fume.
ZIA:	Time Weighted Average (TWA):	10 mg/m <sup>3</sup>	Form of exposure: Fume.
<b>Control parameters:</b>			
Appropriate engineering controls:		Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.	
<b>Individual protection measures, such as personal protective equipment:</b>			
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:		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 dusts are generated. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.	

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>General information:</b>	
Appearance and physical state:	Powder
Color:	Gold
Type of Odor:	Odorless
Odor threshold:	Not applicable
<b>Important health, safety and environmental information:</b>	
Initial Boiling Point and Boiling Range:	No information available.
Melting Point/Freezing Point:	No information available.
Flammability Classification:	No information available.
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):	2.8 - 3.0 g/cm <sup>3</sup> at 68°F (20°C)
Particle size:	10 - 60 µm
Octanol/Water Partition Coefficient (log Pow):	No information available.
Specific Gravity:	No information available.
Bulk Density:	280 - 320 kg/m <sup>3</sup>
Water Solubility:	at 68°F (20°C) practically insoluble
pH:	4-9 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:	No information available.
Incompatible materials:	No information available.
Hazardous decomposition products:	No information available.

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## SECTION II - TOXICOLOGICAL INFORMATION

<b>Information on toxicological effects:</b>		
Acute toxicity (list all possible routes of exposure)		
Acute Dermal Toxicity:	silicon dioxide: Rabbit: > 5,000 mg/kg (IUCLID)	
Skin Corrosion/Irritation:	silicon dioxide: Rabbit - Result: No irritation (OECD Test Guideline 404)	
Serious Eye Damage / Eye Irritation:	silicon dioxide: Rabbit - Result: No eye irritation (OECD Test Guideline 405)	
Respiratory or Skin Sensitization:	silicon dioxide: Guinea Pig - Result: Negative (IUCLID)	
Germ Cell Mutagenicity:	silicon dioxide: Genotoxicity in vitro - Ames test Salmonella typhimurium - Result: Negative (IUCLID) Mutagenicity (mammal cell test): chromosome aberration Result: Negative (IUCLID)  Diiron trioxide: Germ cell mutagenicity - genotoxicity in vitro Ames test - Result: Negative (Lit.)	
Carcinogenicity:	IARC:	Group 2B: Possibly carcinogenic to humans rutile: I317-80-2
	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.
Likely route of exposure:	Inhalation, eye contact, skin contact, ingestion	
Target organs:	Respiratory system, eyes, skin	
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.	
<b>Potential Health Effects:</b>		
Additional Data:	Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions. Handle in accordance with good industrial hygiene and safety practice.	

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## SECTION 12 - ECOLOGICAL INFORMATION

<b>Toxicity:</b>	
Ecotoxicity:	No information available.
Persistence and degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Additional ecological information:	No ecological problems are to be expected when the product is handled and used with due care and attention.
mica (muscovite):	No information available
rutile:	No information available
silicon dioxide:	Toxicity to daphnia and other aquatic invertebrates EC0 Daphnia magna (Water flea): $\geq 10,000$ mg/l; 24h OECD Test Guideline 202  Toxicity to algae IC50 Pseudokirchneriella subcapitata (green algae): 440 mg/l; 72h (IUCLID) NOEC Pseudokirchneriella subcapitata (green algae): 60 mg/l; 72h (IUCLID)
Diiron trioxide:	No information available

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste treatment methods:</b>	
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
<b>Environmental Hazards:</b>	
Environmentally hazardous substance:	No
Special precautions for user:	Not relevant

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## SECTION 15 - REGULATORY INFORMATION

<b>Safety, health and environmental regulations/legislation specific for the substance or mixture:</b>	
US Regulations	
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. 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: mica (muscovite), silicon dioxide, Diiron trioxide
Pennsylvania Right-to-Know:	Ingredients: mica (muscovite), rutile, silicon dioxide, Diiron trioxide
New Jersey Right-to-Know:	Ingredients: mica (muscovite), silicon dioxide, Diiron trioxide
California Prop 65 Components:	Used as directed, this product will NOT expose you to chemicals known to cause cancer.
	Reference to rutile is based on unbound respirable particles and is not generally applicable to product as supplied. The rutile in Pearl Ex Powdered Pigments is bound to mica, and the particle size is too large to be considered respirable. <i>Ingredients: rutile</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.
Korea:	Not in compliance with the inventory.

## SECTION 16 - OTHER INFORMATION

<b>HMIS Hazard ID:</b>	
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.

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<b>Abbreviations:</b>	
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