

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

27103-2129

Pearl Ex Powdered Pigment - 685 Spring Green - Pg I

Revision Date: 05/15/18

SECTION I - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	PEARL EX POWDERED PIGMENT		
Product Number/Code:	685 SPRING GREEN	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: I-800-255-3924	International: I-813-248-0585	

SECTION 2 - HAZARD(S) IDENTIFICATION

•	contain hazardous chemicals based on evaluations made by our compan on 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(I	Mica coated with: titanium oxide, chromium(III) oxide		
Chemical identity	Content in percent (%)*		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		1308-38-9		
Exact percentages withheld as a t	rade secret.			

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	Tightly closed. Dry.	
incompatibilities:	Storage temperature: no restrictions.	

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Basis:	Value:	Threshold limits:	Remarks:
General threshold	limit value for dust:		
ZIA	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/m³	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	e 13463-67-7:		·
ACGIH	Time Weighted Average (TWA):	10 mg/m ³	
osha_trans	PEL:	I5 mg/m³	Form of exposure:Total dust.
ZIA	Time Weighted Average (TWA):	10 mg/m ³	Form of exposure:Total dust.
Mica (muscovite) I	2001-26-2:		
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.
ZIA	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	e 1308-38-9:			
NIOSH/GUIDE	Recommended Expos Limit (REL):	ure 0.5 mg/m³	Expressed as: as Cr.	
OSHA_TRANS	PEL:	I mg/m³	Expressed as: as Cr.	
	PEL:	0.5 mg/m ³	Expressed as: as Cr.	
ZIA	Time Weighted Averag	ge I mg/m³		
ACGIH	Time Weighted Averag	ge 0.5 mg/m³	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 in	formation:	
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/cm³ at 68°F (20°C)	
Particle size:	Particle size: 10.0 - 60.0 µm	
Octor of Marca Postition Coefficient (log Poss)	Mean particle size: 18.0 - 25.0 μm No information available.	
Octanol/Water Partition Coefficient (log Pow):		
Specific Gravity:	No information available.	
Bulk Density:	650 - 700 kg/m³	
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 11 - TOXICOLOGICAL INFORMATION

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: Huma	n experience - Result: Negative (Lit.)
Germ Cell Mutagenicity:	Chromium (III) oxide: Genor Mouse - Result: Negative (Li	,
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 o	contact, ingestion
Target organs:	Respiratory system	
Specific Target Organ Toxicity - single exposure (STOT-se):	The substance or mixture is toxicant, single exposure.	not classified as specific target organ
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 orga 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. Subchron 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

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. Ingredients: Titanium (IV) oxide
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; I - 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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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
214 007	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	Wassergefahrdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System

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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg I

Revision Date: 05/15/18

SECTION I - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	PEARL EX POWDERED PIGMENT		
Product Number/Code:	691 SOLAR GOLD		
Recommended Use:	Artist pigment		
Restrictions on use:	None known	None known	
Manufacturer:	Rupert, Gibbon & Spider, Inc 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433		
Emergency Number:	ChemTel, Inc Contract	#MIS9128344	
	North America: I-800-255-3924	International: I-813-248-0585	

SECTION 2 - HAZARD(S) IDENTIFICATION

•	contain hazardous chemicals based on evaluations made by our compan on 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 dioxide, tin oxide,	Mica coated with: titanium dioxide, tin oxide, ferric oxide, silicon dioxide, auxiliaries	
Chemical identity	Content in percent (%)*		
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	
Exact percentages withheld as a	trade secret.	'	

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	Tightly closed. Dry.
incompatibilities:	Storage temperature: no restrictions.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s):			
Basis:	Value:	Threshold limits:	Remarks:
General threshold I	imit value for dust:		
ZIA	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:	I5 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.
mica (muscovite) I	2001-26-2:		
ACGIH	Time Weighted Average (TWA):	3 mg/m ³	Form of exposure: Respirable fraction.
NIOSH/GUIDE	Recommended Exposure Limit (REL):	3 mg/m ³	Form of exposure: Respirable.
ZIA	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	
silicon dioxide 763 l	-86-9:		
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	6 mg/m ³	
ZIA:	Time Weighted Average (TWA):	6 mg/m ³	
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m ³	The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Diiron trioxide 1309-3	37-1:			
ACGIH:	Time Weighted Averag	ge	5 mg/m³	Form of exposure: Respirable fraction
NIOSH/GUIDE:	Recommended Expos Limit (REL):	Recommended Exposure Limit (REL):		Form of exposure: Dust and fume. Expressed as: as Fe
OSHA_TRANS:	PEL:		10 mg/m ³	Form of exposure: Fume.
ZIA:	Time Weighted Averag	ge	10 mg/m ³	Form of exposure: Fume.
Control parameters:				
Appropriate engineering	controls:			priate working operations should be given nal protective equipment.
Individual protection n	neasures, such as personal	protec	tive 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:		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

General information:		
Appearance and physical state:	Powder	
Color:	Gold	
Type of Odor:	Odorless	
Odor threshold:	Not applicable	
Important health, safety and environmental info	ormation:	
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=I):	2.8 - 3.0 g/cm³ 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/m³	
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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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 6

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SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Dermal Toxicity:	silicon dioxide: Rabbit: > 5,000 mg/kg (IUCLID)	
Skin Corrosion/Irritation:	silicon dioxide: Rabbit - Result: No irritation (OE	CD 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 (IU	CLID)
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: 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.
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 c	lassification criteria are not classified.
otential Health Effects:		
Additional Data:	product is handled appropriately.	excluded but are unlikely when the Inhalation of the dusts should be avoid respiratory organ functions. Handle involves and safety practice

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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 7

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SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
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): >= 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

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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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 8

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SECTION 15 - REGULATORY INFORMATION

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. 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.
Korea:	Not in compliance with the inventory.

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:		
Health:	No information available	
Flammability:	No information available	
Reactivity:	No information available	
Hazard rating: 0 - Minimal; I - 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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Pearl Ex Powdered Pigment - 691 Solar Gold - Pg 9

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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	Wassergefahrdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #658 Aztec Gold

Trade code: #658

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	60
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	22
Fe_2O_3	Diiron Trioxide	1309-37-1	CI 77491	18

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

 $Prevent\ fire\ extinguishing\ water\ from\ contaminating\ surface\ water\ or\ the\ ground\ water\ system.$

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent gold powder

Odor: Odorless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry). Melting point: No information available. **Boiling point:** No information available. Solid/gas flammability: No information available. Lower explosive limit: No information available. Upper explosive limit: No information available. Vapor density: No information available.

Flash point: Not applicable.

Evaporation rate: No information available. **Vapor pressure:** No information available.

 $\begin{tabular}{ll} \mbox{Relative density:} & 2.5 \sim 3.1 \mbox{g/cm}^3. \\ \mbox{Solubility in water:} & \mbox{Insoluble.} \\ \mbox{Lipid solubility:} & \mbox{Insoluble.} \\ \end{tabular}$

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 - 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #661 Antique Copper

Trade code: #661

CAS number: 12001-26-2/13463-67-7/1309-37-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	61
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	23
Fe_2O_3	Diiron Trioxide	1309-37-1	CI 77491	16

No components that are liable to disclose according to Regulation (EC) No.1907/2006.



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent copper powder

Odor: Odorless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry). Melting point: No information available. No information available. **Boiling point:** Solid/gas flammability: No information available. Lower explosive limit: No information available. Upper explosive limit: No information available. Vapor density: No information available.

Flash point: Not applicable.



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

Evaporation rate: No information available. **Vapor pressure:** No information available.

Relative density: $2.5 \sim 3.1 g/cm^3$.Solubility in water:Insoluble.Lipid solubility:Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



SAFETY DATA SHEET

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #661 Antique Copper Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #662 Antique Silver

Trade code: #662

CAS number: 12001-26-2/13463-67-7/1333-86-4

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	72
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	27
Pigment black 7	Pigment black 7	1333-86-4	CI 77266	≤1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid. **In case of Inhalation:** Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection:Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent silver powder

Odor: Odorless.

Odor threshold: No information available. **pH:** $5 \sim 9 \ (10\% \ \text{aqueous slurry}).$

Melting point:No information available.Boiling point:No information available.Solid/gas flammability:No information available.Lower explosive limit:No information available.Upper explosive limit:No information available.Vapor density:No information available.

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According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

Flash point: Not applicable.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

Evaporation rate: No information available. **Vapor pressure:** No information available.

Relative density: $2.4 \sim 3.0 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $17 \sim 23 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 1 of 6

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.2 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #662 Antique Silver Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation

Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

 $16.1 \mbox{Key}$ or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.

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Product code: Pearl Ex #683 Bright Yellow Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #683 Bright Yellow

Trade code: #683

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica TiO ₂ Pigment Violet 23	Mica Titanium dioxide Pigment Violet 23	12001-26-2 13463-67-7 6358-30-1	CI 77019 CI 77891 CI 51319	—————————————————————————————————————
				<u>i</u>

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Page 1 of 6

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Page 2 of 6



Product code: Pearl Ex #683 Bright Yellow

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent yellow powder

Odor: Odorless.

Odor threshold: No information available. $5 \sim 9$ (10% aqueous slurry). pH:

Melting point: No information available. **Boiling point:** No information available. Solid/gas flammability: No information available. Lower explosive limit: No information available. Upper explosive limit: No information available. No information available. Vapor density:

Flash point: Not applicable.

Page 3 of 6



Product code: Pearl Ex #683 Bright Yellow

Evaporation rate: No information available.

Vapor pressure: No information available.

Relative density: $2.7 \sim 3.3 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 4 of 6

Product code: Pearl Ex #683 Bright Yellow Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Page 5 of 6

Product code: Pearl Ex #683 Bright Yellow

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Page 6 of 6

Product code: Pearl Ex #683 Bright Yellow

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

 $16.1\mbox{Key}$ or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.

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Product code: Pearl Ex #684 Flamingo Pink Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #684 Flamingo Pink

Trade code: #684

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	52
Pigment Violet 23	Titanium dioxide	13463-67-7 6358-30-1	CI 77891	——————————————————————————————————————
rigilient violet 23	rigilient violet 23	0330-30-1	G131319	Z

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Page 1 of 6

Product code: Pearl Ex #684 Flamingo Pink

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

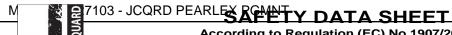
See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Page 2 of 6



According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #684 Flamingo Pink

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

color: Pearlescent pink powder

Odor: Odorless.

Odor threshold: No information available. $5 \sim 9$ (10% aqueous slurry). pH:

Melting point: No information available. **Boiling point:** No information available. Solid/gas flammability: No information available. Lower explosive limit: No information available. Upper explosive limit: No information available. No information available. Vapour density:

Flash point: Not applicable.

Page 3 of 6



Product code: Pearl Ex #684 Flamingo Pink

Evaporation rate: No information available. **Vapor pressure:** No information available.

Relative density: $2.7 \sim 3.3 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.
 No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 4 of 6

Product code: Pearl Ex #684 Flamingo Pink Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Page 5 of 6

Product code: Pearl Ex #684 Flamingo Pink Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Product code: Pearl Ex #684 Flamingo Pink

Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.

Product code: Pearl Ex #686 Turquoise Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #686 Turquoise

Trade code: #686

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

P260 Do not breathe dust. Precautionary statements:

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	53
TiO ₂	Titanium dioxide	13463-67-7	CI 77891 CI 51319	——————————————————————————————————————
Pigment Violet 23	Pigment violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Page 1 of 6

Product code: Pearl Ex #686 Turquoise

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Product code: Pearl Ex #686 Turquoise Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent turquoise powder

Odor Odourless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry).

Melting point: No information available. No information available. **Boiling point:** Solid/gas flammability: No information available. Lower explosive limit: No information available. **Upper explosive limit:** No information available. Vapor density: No information available.

Flash point: Not applicable.

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Product code: Pearl Ex #686 Turquoise

Evaporation rate: No information available. **Vapor pressure:** No information available.

Relative density: $2.7 \sim 3.3 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 4 of 6

Product code: Pearl Ex #686 Turquoise Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Date: 12/19/17 Product code: Pearl Ex #686 Turquoise

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Product code: Pearl Ex #686 Turquoise Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

 $16.1\mbox{Key}$ or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.

Product code: Pearl Ex #687 True Blue Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #687 True Blue

Trade code: #687

CAS number: 12001-26-2/13463-67-7/147-14-8

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	46
TiO2	Titanium dioxide	13463-67-7	CI 77891	53
Pigment Blue 15	Pigment Blue 15	147-14-8	CI 74160	€-1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Page 1 of 6

Product code: Pearl Ex #687 True Blue Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Product code: Pearl Ex #687 True Blue

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent blue powder

Odor: Odorless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry).

Melting point: No information available. No information available. **Boiling point:** Solid/gas flammability: No information available. Lower explosive limit: No information available. **Upper explosive limit:** No information available. Vapor density: No information available.

Flash point: Not applicable.

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Product code: Pearl Ex #687 True Blue

Evaporation rate: No information available.

Vapor pressure: No information available.

Relative density: $2.4 \sim 3.0 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $17 \sim 25 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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Product code: Pearl Ex #687 True Blue Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Product code: Pearl Ex #687 True Blue Date: 12/19/17

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Product code: Pearl Ex #687 True Blue Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

 $16.1 \mbox{Key}$ or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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This SDS cancels and replaces any preceding release.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #688 Misty Lavender

Trade code: #688

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms/ Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	50
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	49
Pigment Violet 23	Pigment Violet 23	6358-30-1	CI 51319	

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

Page 1 of 6

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Page 2 of 6

Product code: Pearl Ex #688 Misty Lavender

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent violet powder

Odor: Odorless.

Odor threshold: No information available. **pH:** $5 \sim 9 \ (10\% \ aqueous \ slurry).$

Melting point:No information available.Boiling point:No information available.Solid/gas flammability:No information available.Lower explosive limit:No information available.Upper explosive limit:No information available.Vapor density:No information available.

Flash point: Not applicable.

Page 3 of 6



Product code: Pearl Ex #688 Misty Lavender

Evaporation rate: No information available. No information available. Vapor pressure:

 $2.7 \sim 3.3 \text{ g/cm}^3$. Relative density:

Solubility in water: Insoluble. Insoluble. Lipid solubility:

Partition coefficient

(n-octanol/water): No information available. **Auto-ignition temperature:** No information available. **Decomposition temperature:** No information available. No information available. Viscosity: **Explosive properties:** No information available. Oxidizing properties: No information available.

9.2 Other information

 $20 \sim 26 \text{ g}/100 \text{ml}$. **Bulk density:**

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

Page 4 of 6

Product code: Pearl Ex #688 Misty Lavender

Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

According to Regulation (EC) No.1907/2006

Product code: Pearl Ex #688 Misty Lavender

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

$14.5\ Transport\ in\ bulk\ according\ to\ Annex\ II\ of\ MARPOL\ 73/78\ and\ the\ IBC\ Code$

Not relevant.

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Product code: Pearl Ex #688 Misty Lavender Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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.

This SDS cancels and replaces any preceding release.

Product code: Pearl Ex #689 Blue Russet Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #689 Blue Russet

Trade code: #689

CAS number: 12001-26-2/13463-67-7/6358-30-1

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. Address: 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

P260 Do not breathe dust. Precautionary statements:

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	47
Pigmont Violet 22	Titanium dioxide	13463-67-7 6358-30-1	CI 77891	52 < 1
Pigment Violet 23	Piginent violet 25	0330-30-1	CI 31319	<u> </u>

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

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Product code: Pearl Ex #689 Blue Russet

Date: 12/19/17

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent red powder

Odor: Odorless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry).

Melting point: No information available. No information available. **Boiling point:** Solid/gas flammability: No information available. Lower explosive limit: No information available. **Upper explosive limit:** No information available. Vapour density: No information available.

Flash point: Not applicable.

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Product code: Pearl Ex #689 Blue Russet

Evaporation rate: No information available. **Vapor pressure:** No information available.

Relative density: $2.7 \sim 3.3 \text{ g/cm}^3$.

Solubility in water: Insoluble. **Lipid solubility:** Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Decomposition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $20 \sim 26 \text{ g}/100 \text{ml}$.

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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Product code: Pearl Ex #689 Blue Russet Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Product code: Pearl Ex #689 Blue Russet

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Product code: Pearl Ex #689 Blue Russet Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

 $16.1 \mbox{Key}$ or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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This SDS cancels and replaces any preceding release.

Product code: Pearl Ex #693 Duo Violet-Brass

Date: 12/19/17

1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

1.1 Product Identifier

Trade name: Pearl Ex #693 Duo Violet-Brass

Trade code: #693

CAS number: 12001-26-2/13463-67-7/6448-96-0

1.2 Relevant identified uses of the substance/mixture and uses advised against

Identified uses: Coloring Agent

1.3 Details of the supplier of the safety data sheet

Company Name: Rupert, Gibbon & Spider, Inc. **Address:** 1147 Healdsburg Ave. CA, 95448

Telephone: 800-442-0455

1.4 Emergency telephone number

CHEMTREC (24HR Emergency Telephone),

call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887 For non-emergency assistance, call: 800-442-0455

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union Legislation.

2.2 Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Pictograms / Symbols: None S-phrase(s) 22 Do not breathe dust.

EC regulation criteria 1272/2008 (CLP):

Precautionary statements: P260 Do not breathe dust.

No special labeling needed.

2.3 Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Ingredients	Chemical Name	CAS No.	CI Name	Weight in Percentage (%)
Mica	Mica	12001-26-2	CI 77019	57
TiO ₂	Titanium dioxide	13463-67-7	CI 77891	42
Pigment red 31	Pigment red 31	6448-96-0	CI 12360	<u>`</u> ≤ 1

No components that are liable to disclose according to Regulation (EC) No.1907/2006.

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Product code: Pearl Ex #693 Duo Violet-Brass Date: 12/19/17

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact: Wash off with soap and plenty of water.

In case of eyes contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

In case of Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

In case of Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures that are in accordance with the local regulations.

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

5.3 Advice for fire-fighters

IN the event of fire, wear self-contained breathing apparatus.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2 Environmental precautions

Don't let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

See also section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent formation of dust

Product code: Pearl Ex #693 Duo Violet-Brass

Any unavoidable deposit of dust must be regularly removed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry, keep packages closed, location away from other material.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific use are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.2 Exposure controls

Eye/face protection: Safety glasses.

Skin protection:

Hand protection: Not required.

Body protection: Protective work clothing.

Other protection: Protective clothing needs to be selected specifically for the workplace, depending

on concentrations and quantities of the hazardous substances handled.

Hygiene measures: Change contaminated clothing. Wash hands after working with substance.

Respiratory protection:

Required when dusts are generated.

Recommended Filter type: Filter P 1 (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 carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal Hazards: No information available.

Environmental exposure controls: Don't let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Powder.

Color: Pearlescent purple powder

Odor: Odorless.

Odor threshold: No information available. pH: $5 \sim 9$ (10% aqueous slurry).

Melting point: No information available. **Boiling point:** No information available. Solid/gas flammability: No information available. Lower explosive limit: No information available. **Upper explosive limit:** No information available. Vapor density: No information available.

Flash point: Not applicable.

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Product code: Pearl Ex #693 Duo Violet-Brass

Evaporation rate: No information available.

Vapor pressure: No information available.

Relative density: $2.5 \sim 3.1 \text{ g/cm}^3$.

Solubility in water: Insoluble. Lipid solubility: Insoluble.

Partition coefficient

(n-octanol/water): No information available.
 Auto-ignition temperature: No information available.
 Viscosity: No information available.
 Explosive properties: No information available.
 Oxidizing properties: No information available.

9.2 Other information

Bulk density: $17 \sim 25 \text{ g/}100 \text{ml.}$

Particle size: $10-60 \mu m$.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Not known to date.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No information available.

11. TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure:

Skin contact: Wash off with soap and plenty of water.

Eye contact: Immediately flush with plenty of water about 15 minutes.

If discomfort persists, get medical aid.

Ingestion: If victim is conscious, induce vomiting, give 2-4 cupfuls of water, get medical aid.

Inhalation: Move person to fresh air. Consult doctor in the event of any complaints.

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Product code: Pearl Ex #693 Duo Violet-Brass Date: 12/19/17

11.2 Information on toxicological effects

Aspiration hazard

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

11.3 Other information

Quantitative data on the toxicity of this product are not available.

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Our own experience has provided no indication of any hazardous potential.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Product code: Pearl Ex #693 Duo Violet-Brass

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. Do not mix with other waste.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)

Not classified as dangerous in the meaning of transport regulations.

14.2 Sea transport (IMDG-Code/GGVSee)

Not classified as dangerous in the meaning of transport regulations.

14.3 Air transport (ICAO-IATA/DGR)

Not classified as dangerous in the meaning of transport regulations.

14.4 Special Precautions for User

No information available.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Product code: Pearl Ex #693 Duo Violet-Brass Date: 12/19/17

15. REGULATORY INFORMATION

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard Legislation: Directive 96/82/EC does not apply.

National legislation Storage class: 10 – 13.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

16.1Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can looked up at www.wikipedia.org.

16.2Training advice

Provide adequate information, instruction and training for operators.

Date: 5/06/2015

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This SDS cancels and replaces any preceding release.