SAFETY DATA SHEET (SDS)

Revision Date: 04/29/21

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	**PEARL EX POWDERED PIGMENTS**	
Product Number/Code:	**630-697 (ALL COLORS)**	
Recommended Use:	Artist pigment	
Restrictions on use:	None known	
Emergency Number:	**ChemTel, Inc.** - Contract #MIS9128344	
	North America: **1-800-255-3924**	International: **1-813-248-0585**

SECTION 2 - HAZARD(S) IDENTIFICATION

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

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity	**Content in percent (%)***	**CAS #**
Iron(III) Oxide(Fe_2O_3)	52 - 56% *(690 & 697 only)*	1309-37-1
Synthetic Mica	44 - 48% *(690 & 697 only)*	12003-38-2
Mica (muscovite)	>= 30% - < 50%	12001-26-2
rutile	0 - < 30%	1317-80-2
Silicon dioxide	0 - < 30%	7631-86-9
Diiron trioxide: Fe_2O_3	0 - < 30%	1309-37-1
Titanium (IV) dioxide: TiO_2	>= 5% - < 70%	13463-67-7
Chromium (III) oxide *(685 only)*	0 - < 30%	1308-38-9
Pigment Violet 23	0 - 3%	6358-30-1
Pigment Red 22	0 - 5%	6448-95-9
Pigment Blue 15	0 - 6%	147-14-8
Pigment Black 7	0 - ≤ 1%	1333-86-4
Pigment Red 31	0 - ≤ 1%	6448-96-0
Tin Oxide(SnO_2)	< 1% *(682 only)*	18282-10-5
Pigment green 7	< 1% *(682 only)*	1328-53-6
Ultramarine blue	< 1% *(696 only)*	57455-37-5
Manganese violet	< 1% *(696 only)*	10101-66-3
D&C Green NO. 6	< .5% *(695 only)*	128-80-3
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:	Suppress (knock down) gases/vapours/mists with a water spray jet.

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. Indications about waste treatment: see section 13.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Observe label precautions.
Hygiene measures:	Change contaminated clothing. Wash hands after working with substance.
Conditions for safe storage including any incompatibilities:	Tightly closed. Dry.
Recommended storage temperature:	See product label.
Additional information:	Risks from decomposition products: see section 10.
Specific end use(s):	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s):			
Basis:	Value:	Threshold limits:	Remarks:
General threshold limit value for dust:			
Z1A	Time Weighted Average (TWA):	5 mg/m^3	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m^3	Form of exposure: Total dust.
	Time Weighted Average (TWA):	50 millions of particles per cubic foot of air	Form of exposure: Total dust.
	Time Weighted Average (TWA):	15 millions of particles per cubic foot of air	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m^3	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m^3	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m^3	Form of exposure: Respirable fraction.
	PEL:	15 mg/m^3	Form of exposure: Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m^3	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m^3	Form of exposure: Respirable particles.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

mica (muscovite) 12001-26-2:			
ACGIH	Time Weighted Average (TWA):	3 mg/m³	Form of exposure: Respirable fraction.
NIOSH/GUIDE	Recommended Exposure Limit (REL):	3 mg/m³	Form of exposure: Respirable.
Z1A	Time Weighted Average (TWA):	3 mg/m³	Form of exposure: Respirable Dust.
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
silicon dioxide 7631-86-9:			
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	6 mg/m³	
Z1A:	Time Weighted Average (TWA):	6 mg/m³	
	Time Weighted Average (TWA):	20 millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m³	The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% Si02. Lower values of % SiO2 will give higher exposure limits.

Diiron trioxide 1309-37-1:			
ACGIH:	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Respirable fraction.
NIOSH/GUIDE:	Recommended Exposure Limit (REL):	5 mg/m³	Form of exposure: Dust and fume. Expressed as: Fe
OSHA_TRANS:	PEL:	10 mg/m³	Form of exposure: Fume.
Z1A:	Time Weighted Average (TWA):	10 mg/m³	Form of exposure: Fume.

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:	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. AU: Not required.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (CONT.)

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. AU: Required when dusts are generated. 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.
Recommended filter type:	Filter P 1 (Acc. to DIN 3181) for solid particles of inert substances.
Environmental exposure controls:	No special precautionary measures necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Powder
Color:	Various - see label
Type of Odor:	Odorless
Odor threshold:	Not applicable
Important health, safety and environmental information:	
Initial Boiling Point and Boiling Range:	No information available.
Melting Point/Freezing Point:	No information available.
Flammability Classification:	No information available.
Flash Point:	Not applicable
Auto-ignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Flammability Limits (lower/upper):	No information available.
Evaporation rate:	No information available.
Vapor Pressure:	No information available.
Vapor Density (Air=1):	2.8 - 3.0 g/cm³ at 68°F (20°C)
Particle size:	5 - 60 µm
Octanol/Water Partition Coefficient (log Pow):	No information available.
Specific Gravity:	No information available.
Water Solubility:	at 20°C practically insoluble
pH:	4 - 11 at 100 g/l 10-20°C (slurry)
Viscosity, kinematic:	No information available.
Explosive Properties:	Not classified as explosive.
Oxidizing Properties:	None
Molecular Formula:	No information available.
Molecular Weight:	No information available.
Relative Density:	2.4 - 3.7 g/cm_3
Bulk Density:	15 - 40 g/100 ml / 280 - 700 kg/m_3
Specific heat value:	No information available.
Saturated vapour concentration:	No information available.
Release of invisible flammable vapours and gases:	No information available.
Size distribution:	No information available.
Shape and aspect ratio:	No information available.
Crystallinity:	No information available.
Dustiness:	No information available.
Surface area:	No information available.
Degree of aggregation or agglomeration, and dispersibility:	No information available.
Redox potential:	No information available.
Biodurability and biopersistence:	No information available.
Surface coating or chemistry:	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.

SECTION 11 - TOXICOLOGICAL INFORMATION -

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

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
PBT and vPvB assessment results:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Additional ecological information:	No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

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
Hazchem or Emergency Action Code	Not relevant
Environmental Hazards:	
Environmentally hazardous substance:	No
Special precautions for user:	Not relevant
Additional Information	Not available

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
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.
International Regulations	
Montreal Protocol	No information available
Stockholm Convention	No information available
Basel Convention	No information available
MARPOL	No information available

SECTION 15 - REGULATORY INFORMATION (CONT.)

Safety, health and environmental regulations/legislation specific for the substance or mixture:	
Regulation (EC) No 850/2004 on persistent organic pollutants:	Not applicable.
REACH - List of substances subject to authorisation (Annex XIV):	Not applicable.
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:	Not applicable.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59):	Not applicable.
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals:	Not applicable.
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles):	Not applicable.
Storage class:	10-13
Chemical safety assessment:	For the product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Training advice: :	Provide adequate information, instruction and training for operators.

Disclaimer:
The information contained in this SDS is based on data from sources considered to be reliable but Dharma Trading Co. does not guarantee the accuracy or completeness thereof. Dharma Trading Co. 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 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