SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF MATERIAL AND SUPPLIER	
SUPPLIER:	Art Tree Creations.
ABN:	65237054733
OFFICE ADDRESS:	1/15 Newcastle Road, Bayswater, 3153
POSTAL ADDRESS:	1/15 Newcastle Road, Bayswater 3153
TELEPHONE:	0417343138
AH EMERGENCY TELEPHONE:	13 1126 (Poisons Information Centre).
WEB PAGE:	www.arttreecreations.com.au
Product Name:	Metallic Mirage.
Proper Shipping Name:	Not applicable.
Product Use:	Inorganic pigment for mixing with organic polymers.
Colours:	Gold Silver Ocean blue Dark blue White Bright red Purple Black Green
Creation Date:	2 September 2015.
Revision Date:	Before 1 September 2020.

SECTION 2 – HAZARDS IDENTIFICATION

This product is not classified as a **HAZARDOUS CHEMICAL** in accordance with the WHS, and is classified as **NON-DANGEROUS GOODS** according to the ADG Code.

CLASSIFICATION:

Hazardous Classes & Categories:	
Physical:	Not applicable.
Health:	Not applicable.
Environmental:	Not applicable.
LABEL ELEMENTS:	
Signal Word:	Not applicable.

Product: Metallic Mirage Page 2 of 16 Date of Issue: September 2015

SAFETY DATA SHEET

Hazard Statements:	Not applicable.
Precautionary Statements:	
Prevention:	Not applicable.
Response:	Not applicable.
Storage:	Not applicable.
Disposal:	Not applicable.
General:	Keep out of reach of children.
	Read label before use.
	Read Safety Data Sheet before use.
Pictogram:	Not applicable.
Pictogram Description:	
Other Hazards which do not result in Classification:	Not applicable.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS		
Ingredients:	CAS Number:	Proportion:
Titanium Dioxide (Non-Hazardous)	13463-67-7	0 - 50% w/w
Non-hazardous ingredients	Not available	To 100 %w/w
Total		100% w/w

SECTION 4 – FIRST AID MEASURE	5
Scheduled Poisons:	Poisons Information Centre in each Australian State capital city can provide additional assistance for scheduled poisons. (Phone Australia 13 1126) or a doctor (at once).
First Aid Facilities Required:	Eye wash fountains and a general washing facility should be easily accessible in the immediate work area.
Inhalation:	Remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects occur.
Skin contact:	For gross contamination immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water and soap. Immediately remove contaminated clothing and wash before reuse. If irritation develops seek medical attention.
Eye contact:	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If irritation develops seek medical attention.
Ingestion (Swallowed):	Immediately rinse mouth with water. Do not give fluids or induce vomiting if patient is unconscious or is having convulsions. If swallowed DO NOT induce vomiting. Never give anything by mouth to an unconscious patient. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration into the lungs. If poisoning occurs, consult a doctor or contact a Poisons Information Centre.
Advice to Doctor:	No specific antidote. Treat symptomatically. Poisons Information Centre in each Australian State capital city can provide additional assistance for scheduled poisons.

SECTION 5 – FIRE FIGHTING MEASURES	
Suitable Extinguishing Equipment & Media:	Product is not combustible, however normal foam can be used to extinguish fire. Also, dry chemical or carbon dioxide may be used to extinguish small fires. Water may be ineffective but should be used to cool fire-exposed containers, structures and to protect personnel.
Unsuitable Extinguishing Media:	None known.
Specific Hazards in Case of Fire:	None known.
Hazards from Combustion Products:	None known.

SECTION 5 – FIRE FIGHTING MEASURES (CONTINUED)

Special Protective Equipment & Precautions for Fire Fighters:	If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. Firefighters should wear full fire kit including safety boots, non-flammable overalls, gloves, hat, goggles, and positive pressure self-contained breathing equipment. Heating can cause expansion or decomposition of the material which can lead to the container(s) exploding. If safe to do so, remove container(s) from the path of the fire if it can be done without risk. Do not scatter spilled material with high- pressure water streams. Dyke for later disposal. Use extinguishing agents for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.
Hazchem Code:	Not applicable.
IERG:	Not applicable.
Flash Point:	Not applicable.
Flammability:	Product is not combustible. This material is NON-DANGEROUS GOODS according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

SECTION 6 – ACCIDENTAL RELEASE MEASURES

<u>Spills:</u>

Personal Precautions, Protective Equipment & Emergency Procedures: In case of spill, particular danger of slipping on leaked/spilled product. Isolate hazard area. Avoid all personal contact, including skin and eye contact and inhalation. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling and Storage for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

<u>Eye and face protection</u>: The use of face shields, chemical goggles, or safety glasses with side shield protection (meeting the requirements of AS/NZS 1337) is recommended. If exposed to dust or fume, wear dust-tight goggles (meeting the requirements of AS/NZS 1337).

Skin protection:

<u>Hand protection</u>: Chemical resistant gloves (e.g. Butyl, Neoprene, PE/EVAL/PE, Viton gloves >1 mm thickness, complying with AS 2161) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin. <u>Clothing:</u> Suitable protective clothing complying with AS 4501, suitable chemical resistant footwear complying with AS/NZS 2210 are recommended. **Respiratory protection:**

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced use an approved air purifying respirator (with Class P3 filter for particulates) meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

SECTION 6 – ACCIDENTAL RELEASE MEASURES (CONTINUED)

Environmental Precautions:	Do not allow to enter drainage system, surface or ground water. In the event of product entering waters or drainage system, or polluting soil or plants contact the Environmental Protection Authority or your local Waste Management Authority.
Methods & Materials for Containment & Cleaning up:	Spilt material should be absorbed into dry, inert material (e.g. sand, vermiculite, diatomite, etc.), which then can be put into appropriately labelled drums. Residual can be removed with solvent. Solvents are not recommended for cleanup unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. Consult appropriate solvent Safety Data Sheet for handling information and exposure guidelines. The wasted material can be disposed of by incineration (preferably high temperature) by an approved agent according to local conditions.

SECTION 7 – HANDLING AND STORAGE	
Precautions for Safe Handling:	Avoid spills – particular danger of slipping on leaked/spilled product. Avoid all personal contact, including skin and eye contact and inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use.
Information about Fire & Explosion Protection:	No special precautionary requirements.
Conditions for Safe Storage, including any Incompatibilities:	Store in a well-ventilated area. Store in a cool, dry place and out of direct sunlight. Store away from incompatible substances including explosive substances. Keep containers closed at all times – check regularly for leaks.
Suitable Materials for Receptacles & Pipes:	For containers or container linings use stainless steel.
Unsuitable Materials for Receptacles:	None known.
Container Advice:	Containers, even those that have been emptied, can contain residual product and should be cleaned prior to disposal. Product should be disposed of by incineration (preferably high temperature) by an approved agent according to local conditions.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Control Measures:	Ensure the following exposure standards are not exceeded using appropriate engineering controls (where possible) or individual protection measures Including Personal Protective Equipment (PPE) and that the appropriate biological monitoring is carried out.
Exposure Standards:	National Occupational Exposure Limits, as published by Safework Australia: Time-weighted Average (TWA): None established for product. TWA for inhalable dust is 10 mg/m ³ .
	Short Term Exposure Limit (STEL): None established for product.
	These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
Biological Monitoring:	Safe Work Australia have not published any Biological Limits for ingredients of this product.
Engineering Controls:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.
Individual Protection Measures Including Personal Protective Equipment (PPE):	Eve and face protection: The use of face shields, chemical goggles, or safety glasses with side shield protection (meeting the requirements of AS/NZS 1337) is recommended. If exposed to dust or fume, wear dust-tight goggles (meeting the requirements of AS/NZS 1337).
	Skin protection: <u>Hand protection</u> : Chemical resistant gloves (e.g. Butyl, Neoprene, PE/EVAL/PE, Viton gloves >1 mm thickness, complying with AS 2161) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin. <u>Clothing:</u> Suitable protective clothing complying with AS 4501, suitable chemical resistant footwear complying with AS/NZS 2210 are recommended.
	<u>Respiratory protection:</u> Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced use an approved air purifying respirator (with Class P3 filter for particulates) meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

SECTION 5 THISICAE AND CHEIMIN	
Physical Description/ Properties:	
Appearance:	Fine powder (various colours).
Odour:	Odourless.
Odour Threshold:	No test data available.
pH:	6.0-9.0 (4% dispersion in water).
Melting Point/ Freezing Point:	Not available.
Initial Boiling Point/ Boiling Range:	Not applicable.
Flashpoint:	Not applicable.
Evaporation Rate:	Not applicable.
Flammability (solid, gas):	Not applicable.
Upper/Lower Flammability or Explosive Limits:	Not available.
Vapour Pressure:	Not applicable.
Vapour Density:	Not applicable.
Density:	Ca. 2.9-3.2 kg/L.
Bulk Density:	Ca. 16-28 g/100 g.
Solubility:	Insoluble in water.
Partition coefficient: n- octanol/water:	Not applicable.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not applicable.
Average Particle Size:	10-60 μm.
Mass-Median-Diameter, D50:	21-26 μm.

SECTION 10 – STABILITY AND REACTIVITY	
Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable at normal temperatures and pressure.
Possibility of Hazardous Reactions:	Product may represent an explosive dust hazard.
Conditions to Avoid:	No further relevant information available.
Incompatible Materials:	Avoid static electricity build up or exposure to flames.
Hazardous Decomposition Products:	Product is not combustible.

SECTION 11 – TOXICOLOGICAL INFORMATION	
Health Effects:	No data for product
Acute Toxicity Data (Oral):	No data for product
Acute Toxicity Data (Dermal):	No data for product
Acute Toxicity Data (Inhalation):	No data for product
Skin Corrosion/Irritation:	No data for product
Serious Eye Damage/Irritation:	No data for product
Respiratory or Skin Sensitisation:	No data for product
Germ Cell Mutagenicity:	No data for product
Carcinogenicity:	No data for product
Reproductive Toxicity:	No data for product.
Specific Target Organ Toxicity (STOT) – Single Exposure:	No data for product

SECTION 11 – TOXICOLOGICAL INFORMATION (CONTINUED)

Specific Target Organ Toxicity (STOT) – Repeated Exposure:	No data for product
Aspiration Hazard:	No data for product
Information on Possible Routes of Exposure:	Eye and skin contact, ingestion and inhalation.
Ingestion (Swallowing):	Not to be ingested. No adverse health effects are expected from swallowing.
Eye Contact:	Dust may cause irritation and inflammation.
Skin Contact:	May cause skin irritation.
Inhalation:	May cause irritation of the respiratory tract. Prolonged or repeated exposure may cause lung damage.
Other Health Effects:	Prolonged or repeated exposure to dust may cause lung damage and/or pulmonary problems.
Repeated Dose Toxicity:	No data for product.
Developmental Toxicity:	No data for product.

SECTION 12 – ECOLOGICAL INFORMATION	
Ecotoxicity:	Product is not classified as Hazardous to the aquatic environment.
Fish toxicity:	No data for product.
Invertebrates toxicity:	No data for product.
Algae toxicity:	No data for product.
Toxicity to Microorganisms:	No data for product.
Persistence and Degradability:	No data for product.
Biological Oxygen Demand (BOD):	No data for product.
Theoretical Oxygen Demand (ThOD):	No data for product.
Chemical Oxygen Demand (COD):	No data for product.
BOD/COD Ratio:	No data for product.
Bio-accumulative potential:	No data for product.
Mobility in Soil:	No data for product.
Other Adverse Effects:	No data for product.
General:	DO NOT DISCHARGE INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Product is immiscible with water. Do not allow product to reach ground water, water course or sewage system. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal methods:	
Product:	Dispose of product through a licensed chemical waste collection agent following consultation with the pertinent Waste Management Authority and adhering to the applicable local, state and national regulations. Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited by local regulation. The product is suitable for processing at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.
Individual Protection Measures:	Refer to Individual Protection Measures Including Personal Protective Equipment (PPE) in Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION.
Uncleaned Packaging:	Containers, even those that have been emptied, can contain residual product and should be cleaned prior to disposal. Product should be disposed of by incineration (preferably high temperature) by an approved agent according to local conditions.

SECTION 14 – TRANSPORT INFORMATION	
Road and Rail Transport:	This material is NON-DANGEROUS GOODS according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).
Marine Transport:	This product is classified as NON-DANGEROUS GOODS by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Air Transport:	This product is classified as NON-DANGEROUS GOODS by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
UN Number:	Not applicable.
UN Proper Shipping Name or Technical Name:	Not applicable.
ADG Class:	Not applicable.
Packing Group:	Not applicable.
HAZCHEM Code:	Not applicable.
IERG:	Not applicable.

SECTION 15 – REGULATORY INFORMATION	
SUSMP:	Poisons Schedule 5 allocated.
Australian Standards:	AS/NZS 1337.1:2010: Personal eye protection - Eye and face protectors for occupational applications.
	AS/NZS 1715:2009: Selection, use and maintenance of respiratory protective equipment.
	AS/NZS 1716:2012: Respiratory protective devices.
	AS 1940:2004: The storage and handling of flammable and combustible liquids.

AS/NZS 2161.1:2000: Occupational protective gloves: Selection, use and maintenance.

AS/NZS 2161.2:2005: Occupational protective gloves: General requirements.

AS/NZS 2161.10.1:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms —Terminology and performance requirements.

AS/NZS 2161.10.2:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms—Determination of resistance to penetration.

AS/NZS 2161.10.3:2005: Occupational protective gloves: Protective gloves against chemicals and micro-organisms—Determination of resistance to permeation by chemicals.

SECTION 15 - REGULATORY INFORMATION (CONTINUED)

	AS/NZS 2210.1:2010: Safety, protective and occupational footwear - Guide to selection, care and use.
	AS/NZS 2210.2:2009: Occupational protective footwear - Test methods (ISO 20344:2004, MOD).
	AS/NZS 2210.4:2009: Occupational protective footwear - Specification for protective footwear (ISO 20346:2004, MOD).
	AS/NZS 4501.1:2008: Occupational protective clothing - Guidelines on the selection, use, care and maintenance of protective clothing.
	AS/NZS 4501.2:2006: Occupational protective clothing - General requirements.
NICNAS:	All ingredients present on AICS.

SECTION 16 – OTHER INFORMATION	
Acronyms and Comments:	
ACGIH:	American Conference of Industrial Hygienists.
ADG Code:	Australian Code for the Transport of Dangerous Goods by Road and Rail.
AET:	Australian Eastern Time is the time operating in New South Wales, Victoria, Tasmania and Australian Capital Territory (all of which jurisdictions observe Daylight Saving Time during the Summer period). It also operates in Queensland but this jurisdictions does not observe Daylight Saving Time.
AICS:	Australian Inventory of Chemical Substances.
AS:	Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia.
AS/NZ:	Standards issued by Standards Australia, GPO Box 476, Sydney NSW 2001, Australia and Standards New Zealand, Private Bag 2439 Wellington 6140, New Zealand.
ASTM:	ASTM International, known until 2001 as the American Society for Testing and Materials (ASTM), an international standards organisation that develops and publishes voluntary consensus technical standards. It is based in West Conshohocken, Pennsylvania, USA.
BEI:	Biological Exposure Indices published by the American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240-4148, USA.
CAS Number:	Chemical Abstracts Service Registry Number.
EVAL:	Ethylene-vinyl Alcohol or EVOH (EVAL).
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals, a globally harmonized system for classification and labelling of chemicals proposed by the United Nations.
HAZCHEM:	An emergency action code of numbers and letters which gives information to emergency services.
IARC:	International Agency for Research on Cancer.
IERG:	Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB 76:2010 Standards Australia/Standards New Zealand).
NBR:	Nitrile/butadiene rubber.
NICNAS:	National Industrial Chemicals Notification and Assessment Scheme.

NTP:	National Toxicology Program (USA Department of Health and Human Services).
OSHA:	Occupational Safety and Health Administration (USA).
PVAL:	Polyvinyl Alcohol or PVA.
Safe Work Australia:	Safe Work Australia was formerly the Australian Safety and Compensation Council, which included the National Occupational Health and Safety Commission (NOHSC).
SDS:	Safety Data Sheet.

SECTION 16 – OTHER INFORMATION (CONTINUED)

STEL:	Exposure standard - short term exposure limit, a 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.
SUSMP:	Standard for the Uniform Scheduling of Medicines and Poisons.
TWA:	Exposure standard - time-weighted average, the average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day working week.
UN Number:	United Nations Number.
WHS:	Model work health and safety legislation introduced by the Australian government which consists of an integrated package of a model Work Health and Safety (WHS) Act, supported by model Work Health and Safety (WHS) Regulations, model Codes of Practice and a National Compliance and Enforcement Policy. The WHS Regulations implement a new system of chemical hazard classification, labelling and safety data sheet requirements based on the GHS.
Issue Date:	2 September 2015.
Supersedes Issue Date:	Not applicable.
Revision Information:	New issue.
Contact Point:	Regulatory Affairs Manager.
Telephone:	1300 886 945.
Note:	Safety Data Sheets are updated frequently. Please ensure that you have a current copy.
Disclaimer:	This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since Evolution Polymers Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. This SDS does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.