

### SAFETY DATA SHEET (SDS)

SHEIT BITTI SHEET (SDS)					
Section 1. Identification					
Product identifier	UV	UVOVERPRINT VARNIS MATTE 90			
Other means of identification FCL-090					
Recommended use and restrictions on use UV screen printing inks and varnishes					
Initial supplier identifier Aria Inks. 101-1079, rue des Forges, Terrebonne, QC, J6Y 0J9 (Canada) Tél. (450) 966-9000					
Emergency telephone number/restriction on use Canada – CANUTEC Number 24 hours 613-996-6666					
Section 2. Hazard Identification					

# Classification of hazardous product (name of the category or subcategory of the hazard class)

Acute toxicity, oral, dermal and inhalation (Category 4)

Skin corrosion/irritation (Category 2)

Skin sensitisation (Category 1B)

Serious eye damage/eye irritation (Category 2A)

Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3)

Carcinogenicity (Category 2)

Reproductive toxicity (Category 2)

Hazardous to the aquatic environment acute hazard (Category 2)

Hazardous to the aquatic environment short/long term hazard (Category 3)

## Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)





#### Warning

H302+H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

H315 Causes skin irritation.

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H351 Suspected of causing cancer

H361 May damage fertility or the unborn child

H401Toxic to aquatic life

H412 Harmful to aquatic life with long lasting effects

#### Prevention

P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash hands/nails/face/eyes thoroughly after handling. P270 Do not eat, drink or smoke when using this product P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace P273 Avoid release to the environment P280 Wear gloves/protective clothing/gloves/eye protection/face protection.

### Response

IF SWALLOWED: P301 + P312 call a Poison Center/doctor if you feel unwell. P330 Rinse mouth.

IF ON SKIN: P302+P352 Wash with plenty of water. P333+P313 If skin irritation or rash occurs: Get medical advice attention. P362 + P364 Take off contaminated clothing and wash it before reuse.

IF INHALED: P304 + P340 Remove person to fresh air and keep comfortable for breathing. P312 call a Poison Center/doctor if you feel unwell.

IF IN EYES: P305 + P351 + P338 Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention.

IF EXPOSED OR CONCERNED: P308 + P313 Get medical advice/attention

## Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed P235 Keep cool P405 Stored locked up

#### **Disposal**

P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known None				
Section 3. Composition/Information on Ingredients				
Chemical name (common name/synonyms)	CAS number or other	Concentration (%)*		
Acrylic oligomer		10 - 30 %		
Blend of acrylated Monomers		< 40 %		
Vinyl Monomers		5 – 20 %		
Photoinitiator				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	< 10 %		
2-Hydroxy-2-methyl-1-phenyl-propan-1-one	7473-98-5	< 10 %		
*Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) considered trade secret(s)				



Section 4. First-Aid Measures			
Inhalation	IF INHALED: If overexposure remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial		
	respiration or give oxygen by trained personnel. If symptoms persist, seek medical attention.		
Ingestion	IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting. Prevent aspiration of vomit. Rinse mouth thoroughly		
	with water. Never give anything by mouth to an unconscious person.		
Skin contact	IF ON SKIN: Remove contaminated clothing, wash immediately with soap and water (20 - 30 minutes). If skin irritation		
	occurs: Get medical attention. Wash contamin	nated clothing before reuse. Discard or decontaminate footwear before reuse.	
Eye contact	IF IN EYES, Rinse cautiously with water for	several minutes (20 - 30 minutes). Remove contact lenses, if present and easy to	
	do. Continue rinsing. If eye irritation persists: Get medical attention.		
Most important symptoms and effects (acute or delayed)		Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation.	
		May cause an allergic skin reaction. Causes serious eye irritation. May cause	
		respiratory irritation. Suspected of causing cancer. May damage fertility or the	
		unborn child.	
Indication of immediate medical attention/special treatment		In all cases, call a doctor. Do not forget this document.	

### **Section 5. Fire-Fighting Measures**

## Specific hazards of the hazardous product (hazardous combustion products)

Carbon monoxide and dioxide, nitrogen oxides, acrid fumes and smoke.

## Suitable and unsuitable extinguishing media

In case of fire: Use Carbon dioxide, dry chemical, foam, water spray, water

## Special protective equipment and precautions for fire-fighters

During a fire, irritating/toxic fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment as required.

#### **Section 6. Accidental Release Measures**

## Personal precautions, protective equipment and emergency procedures

Evacuate non-emergency personnel. Isolate the area and prevent access. Control source of the leak. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8). Prevent the spill spread into drains, sewers, water supplies, or soil. Eliminate all ignition sources (no smoking, flares, sparks or flames) in immediate area. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material

## Methods and materials for containment and cleaning up

Avoid prolonged exposure. Stop leak if you can do it without risk. Spill should be contained with inert material and disposed into suitable retaining area. Do not touch or walk through spilled material. Small volumes of liquid may be contained or absorbed into an appropriate absorbent. Keep away from all watercourses. Do not flush down storm or sanitary sewer. Take precautionary measures against static discharges. Dispose of in accordance with local, provincial and federal regulations.

### Section 7. Handling and Storage

## **Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands/nails/face/eyes thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear gloves/protective clothing/gloves/eye protection/face protection...

## Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area. Keep container closed when not in use. Do not handle or store near open flames, heat or other sources of ignition. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labeled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks. Storage temperature: 15 - 27 °C.

## **Section 8. Exposure Controls/Personal Protection**

## Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: ACGIH – TLV-TWA Not available

## **Appropriate engineering controls**

Use product in well-ventilated areas. Do not spray the product. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Supply emergency safety/quick-drench shower, eyewash station and washing facilities available in work area and near handling area. Where such systems are not effective, wear suitable personal protection equipment which performs satisfactorily and meets recognized standards.

## Individual protection measures/personal protective equipment

Gloves: Neopren gloves or equivalent; Clothing: use suitable protective clothing to prevent any possibility of skin contact; Respiratory: Not required if working area is well ventilated. Use a NIOSH approved respirators if the exposure limits are unknown; Equipment: Safety glasses, chemical resistant. Special instructions for protection and hygiene: Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

Section 9. Physical and Chemical Properties					
Appearance, physical state/colour	Liquid	Vapour pressure	Not available		



Odour Slightly acrylic odour	Vapour density Not available		
Odour threshold Not available	Relative density Not available		
pH Not applicable	Solubility Insoluble		
Melting/freezing point Not available	Partition coefficient - n-octanol/water Not available		
Initial boiling point/range Not available	Auto-ignition temperature Not available		
Flash point $> 100$ °C (212 °F)	<b>Decomposition temperature</b> Not available		
Evaporation rate Not available	Viscosity Not available		
Flammability (solids and gases) Not available	VOC Not available		
Upper and lower flammability/explosive limits Not available	Other None known		

#### Section 10. Stability and Reactivity

#### Reactivity

Stable under normal conditions.

#### Chemical stability

Yes, Stable under the recommended storage and handling conditions prescribed.

#### Possibility of hazardous reactions

Non under normal conditions of storage and use.

#### Conditions to avoid (static discharge, shock or vibration)

Heat and sun light; the product must be stored in a dry and dark area; the temperature must not exceed 27 deg. C.

## **Incompatible materials**

Avoid contact with strong oxidizing agents, peroxides or other polymerisation initiators, strong acid or bases, metallic powders or pigments.

#### **Hazardous decomposition products**

Carbon mono and dioxide, nitrogen oxides, other toxic fumes.

### **Section 11. Toxicological Information**

#### Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)

Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer. May damage fertility or the unborn child.

## Symptoms related to the physical, chemical and toxicological characteristics

No specific information available.

## Delayed and immediate effects (chronic effects from short-term and long-term exposure)

 $Skin\ Sensitization-May\ cause\ allergic\ skin\ reaction.\ Respiratory\ Sensitization-May\ cause\ severe\ respiratory\ system\ irritation;$ 

Germ Cell Mutagenicity – Not available; Carcinogenicity – Not available; Reproductive Toxicity – Not available;

Specific Target Organ Toxicity — Single Exposure – Not available; Specific Target Organ Toxicity — Repeated Exposure – Not available;

Aspiration Hazard – May cause respiratory sensitization with asthma like symptoms in susceptible individuals; Health Hazards Not Otherwise Classified – No data available.

## Numerical measures of toxicity (ATE; $LD_{50}$ & $LC_{50}$ )

Acrylic Oligomer  $LD_{50}$  Oral ->2000 mg/kg;  $LD_{50}$  Dermal - Rabbit >2000 mg/kg;  $LC_{50}$  Inhalation >5 mg/l (Dust/mist); CAS 75980-60-8  $LD_{50}$  Oral - Rat 5000 mg/kg;  $LD_{50}$  Dermal - Rat 2000 mg/kg;  $LC_{50}$  Inhalation - Not data<sup>3</sup>; CAS 7473-98-5  $LD_{50}$  Oral - Rat 1694 mg/kg;  $LD_{50}$  Dermal - Rat 6929 mg/kg;  $LC_{50}$  Inhalation - Not data; ATE not available in this document.

#### **Section 12. Ecological Information**

#### **Ecotoxicity (aquatic and terrestrial information)**

Fish toxicity Acrylic Oligomer LC50 4,6 to 10 mg/l (Leuciscus idus - 96h); CAS: 75980-60-8: LC50: ~ 6.53 mg/L (Oryzias latipes, 48h); CAS: 7473-98-5: LC50: 160 mg/L (Leuciscus idus (Golden orfe), 48h)

Invertebrate toxicity Acrylic Oligomer EC50 = 2.6mg/l (Water Flea (Daphnia magna – 48h); CAS: 75980-60-8: EC50: 3.53 mg/L (48h, Daphnia magna); CAS: 7473-98-5:>119 mg/L (48h, Daphnia magna).

**Aquatic plant and Algae toxicity** Acrylic Oligomer EC50 1.5 mg/L (Desmodesmus subspicatus 72h); CAS: 7473-98-5: EC50: 1.95 mg/L (Desmodesmus subspicatus 72h)

Persistence and degradability CAS: 75980-60-8: Water degradation (%) 70-80: 14 days; CAS: 7473-98-5: Water degradation (%) 90-100: 28 days.

**Bioaccumulative potential** CAS: 75980-60-8: (BCF: ~22 – 32, Freshwater fish; CAS: 7473-98-5: Bioaccumulation is unlikely.

Mobility in soil No data available

Other adverse effects Harmful to aquatic life with long lasting effects.

#### **Section 13. Disposal Considerations**

### Information on safe handling for disposal/methods of disposal/contaminated packaging

Dispose of contents/container into safe container in accordance with local, regional or national regulations.

#### **Section 14. Transport Information**

### UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations

Non regulated

UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)

Non regulated

UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)



Non regulated			
	ions (transport/conveyance) None		
Environmental hazards (IMDG or other) None			
	(usually more than 450 L in capacity) None		
•	Section 15. Regulatory Information		
Safety/health C	anadian regulations specifics  This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).		
Environmental	Canadian regulations specifics Refer to Section 3 for ingredient(s) of the DSL		
Safety/health/er	nvironmental outside regulations specifics		
United States OS	SHA information: This product is regulated according to OSHA (29 CFR).		
United States EF	A (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.		
United States TO	CSA information: Refer to the ingredients listed in Section 3. California Proposition 65: This product does not contain an		
ingredient know	n to the State of California to cause cancer or other reproductive harm.		
	Section 16. Other Information		
Date of the lates	st revision of the safety data sheet   September 07, 2018 - version 01		
References	Safety Data Sheets from manufacturer/supplier & from Sigma-Aldrich.com & Echa.eurpea.eu		
Abbreviations			
ACGIH	American Conference of Governmental Industrial Hygienists		
ATE	Acute toxicity estimate		
CAS	Chemical Abstract Service		
DSL	Domestic Substance List		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods Code		
LC	Lethal concentration		
LD	D Lethal Dosage		
NIOSH	National Institute for Occupational Safety and Health		
NTP	National Toxicology Program (U.S.A.)		
OSHA	Occupational Safety and Health Administration (U.S.A.)		
PEL	Permissible Exposure Limit		
STEL	Short-term Exposure Limit		
TDG	Transport of dangerous goods in Canada		
TLV	Threshold Limit Value		
TSCA	TSCA Toxic Substances Control Act		
TWA	Time Weighted Average		
WHMIS Workplace Hazardous Materials Information System			
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