

# SAFETY DATA SHEET

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issue Date 20-Aug-2019

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Version 1

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Name AM.CO.ZA Premium Ink Cyan

Contains gamma-Butyrolactone, Proprietary Acrylic Ester Derivative

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Digital Printing

Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Advanced Machinery (Pty) Ltd

For further information, please contact

Contact Point Product safety department

### 1.4. Emergency telephone number

Emergency Telephone During normal opening times: 011 397 1429

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H336)

Classification according to Directive 67/548/EEC or 1999/45/EC

Full text of R-phrases: see section 16

### 2.2. Label elements

#### Product identifier

Contains gamma-Butyrolactone, Proprietary Acrylic Ester Derivative



#### Signal word

Danger

#### Hazard statements

H318 - Causes serious eye damage

H336 - May cause drowsiness or dizziness

**Precautionary Statements - EU (§28, 1272/2008)**

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

**2.3. Other hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Diethylene glycol diethyl ether	203-963-7	112-36-7	<40	Eye Irrit. 2 (H319)	No data available
gamma-Butyrolactone	202-509-5	96-48-0	<25	Acute Tox. 4 (H302) Eye Dam. 1 (H318) STOT SE 3 (H336)	No data available
Dipropylene glycol monomethyl ether	252-104-2	34590-94-8	<15	non Hazardous	No data available
Proprietary Acrylic Ester Derivative	Listed	-	<5	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Eye Dam. 1 (H318)	Not applicable

**Full text of R-phrases: see section 16****Full text of H- and EUH-phrases: see section 16****Section 4: FIRST AID MEASURES****4.1. Description of first aid measures**

<b>Inhalation</b>	Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**4.2. Most important symptoms and effects, both acute and delayed****Symptoms** No information available.**4.3. Indication of any immediate medical attention and special treatment needed****Note to doctors** Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable extinguishing media**

No information available

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Ensure adequate ventilation, especially in confined areas.

#### **For emergency responders**

Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Collect spillage.

### 6.3. Methods and material for containment and cleaning up

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

### 6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

Ensure adequate ventilation, especially in confined areas.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

#### **Incompatible materials**

None known based on information supplied.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters**

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Dipropylene glycol monomethyl ether 34590-94-8	TWA 50 ppm TWA 308 mg/m <sup>3</sup> *	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> STEL: 150 ppm STEL: 924 mg/m <sup>3</sup> Sk*	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> *	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> vía dérmica*	TWA: 50 ppm TWA: 310 mg/m <sup>3</sup>
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
gamma-Butyrolactone 96-48-0	-	-	-	TWA: 50 ppm TWA: 14 mg/m <sup>3</sup> STEL: 250 ppm STEL: 70 mg/m <sup>3</sup> iho*	-
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> pelle*	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> STEL: 150 ppm P*	TWA: 300 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 310 mg/m <sup>3</sup> iho*	TWA: 50 ppm TWA: 309 mg/m <sup>3</sup> H*
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 50 ppm TWA: 307 mg/m <sup>3</sup> STEL 100 ppm STEL 614 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 300 mg/m <sup>3</sup> STEL: 50 ppm STEL: 300 mg/m <sup>3</sup>	STEL: 480 mg/m <sup>3</sup> TWA: 240 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 300 mg/m <sup>3</sup> STEL: 75 ppm STEL: 375 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup> STEL: 150 ppm STEL: 924 mg/m <sup>3</sup> Sk*

**Derived No Effect Level (DNEL)** No information available.**Predicted No Effect Concentration (PNEC)** No information available.**8.2. Exposure controls****Engineering Controls** Ensure adequate ventilation, especially in confined areas.**Personal protective equipment****Eye/face protection** Tight sealing safety goggles.**Skin and body protection** Suitable protective clothing.**Environmental exposure controls** No information available.**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odour</b>	Characteristic
<b>Appearance</b>	Liquid	<b>Odour threshold</b>	No information available
<b>Colour</b>	Cyan		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>		No information available	
<b>Melting point / freezing point</b>		No information available	
<b>Boiling point / boiling range</b>	100 °C / 212 °F	No information available	
<b>Flash point</b>	> 100 °C / > 212 °F	No information available	
<b>Evaporation rate</b>		No information available	
<b>Flammability (solid, gas)</b>		No information available	
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>		No information available	
<b>Lower flammability limit</b>		No information available	
<b>Vapour pressure</b>		No information available	

<b>Vapour density</b>		No information available
<b>Relative density</b>		No information available
<b>Water solubility</b>	Immiscible in water	No information available
<b>Solubility(ies)</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Kinematic viscosity</b>		No information available
<b>Dynamic viscosity</b>		No information available
<b>Explosive properties</b>	Not an explosive	
<b>Oxidising properties</b>	Not applicable	

**9.2. Other information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## Section 10: STABILITY AND REACTIVITY

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

**10.3. Possibility of hazardous reactions****Possibility of Hazardous Reactions**

None under normal processing.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

None under normal use conditions.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects****Acute toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin contact</b>	No data available.
<b>Ingestion</b>	No data available.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2,275.00

ATEmix (dermal) 4,360.00

**Unknown acute toxicity**

95.21699999 % of the mixture consists of ingredient(s) of unknown toxicity.

3.10099999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

3.10099999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

75.21699999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

95.21699999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

75.21699999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Diethylene glycol diethyl ether	= 4970 mg/kg ( Rat )	= 6700 µL/kg ( Rabbit )	
Diethylene glycol methyl ethyl ether	= 6500 µL/kg ( Rat ) > 2000 mg/kg ( Rat )	= 7070 µL/kg ( Rabbit ) > 2000 mg/kg ( Rat )	> 5.14 mg/L ( Rat ) 4 h
gamma-Butyrolactone	= 1540 mg/kg ( Rat )		> 5100 mg/m <sup>3</sup> ( Rat ) 4 h
Dipropylene glycol monomethyl ether	= 5.35 g/kg ( Rat )	= 9500 mg/kg ( Rabbit )	
N,N-Dimethylacrylamide	> 215-464 mg/kg ( Rat )	= 519 mg/kg ( Rabbit )	> 776 ppm ( Rat ) 1 h

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Central nervous system, Eyes, Respiratory system.
<b>Aspiration hazard</b>	No information available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Unknown aquatic toxicity 65.316 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

65.316 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
gamma-Butyrolactone	360: 72 h Desmodesmus subspicatus mg/L EC50 79: 96 h Desmodesmus subspicatus mg/L EC50	220 - 460: 96 h Leuciscus idus mg/L LC50 static	500: 48 h Daphnia magna Straus mg/L EC50
Dipropylene glycol monomethyl ether	-	10000: 96 h Pimephales promelas mg/L LC50 static	1919: 48 h Daphnia magna mg/L LC50

### 12.2. Persistence and degradability

No information available.

**12.3. Bioaccumulative potential**

No information available.

Chemical Name	Partition coefficient
gamma-Butyrolactone	-0.566
Dipropylene glycol monomethyl ether	-0.064

**12.4. Mobility in soil****Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

No information available

## Section 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.

## Section 14: TRANSPORT INFORMATION

**IMDG**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Marine pollutant</b>	Not applicable
<b>14.6 Special Provisions</b>	None
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available

**RID**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	None

**ADR**

<b>14.1 UN/ID no</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing Group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable

14.6 Special Provisions None

**IATA**

14.1 UN/ID no Not regulated  
 14.2 Proper Shipping Name Not regulated  
 14.3 Hazard Class Not regulated  
 14.4 Packing Group Not regulated  
 14.5 Environmental hazard Not applicable  
 14.6 Special Provisions None

## Section 15: REGULATORY INFORMATION

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

**France****Occupational Illnesses (R-463-3, France)**

Chemical Name	French RG number	Title
Diethylene glycol diethyl ether 112-36-7	RG 84	-
gamma-Butyrolactone 96-48-0	RG 84	-
Dipropylene glycol monomethyl ether 34590-94-8	RG 84	-

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable

**International Inventories**

**All of the components in the product are on the following Inventory lists** No information available.

**15.2. Chemical safety assessment**

No information available

## Section 16: OTHER INFORMATION

**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of R-phrases referred to under sections 2 and 3**

No information available

**Full text of H-Statements referred to under section 3**

H319 - Causes serious eye irritation  
 H301 - Toxic if swallowed  
 H311 - Toxic in contact with skin  
 H318 - Causes serious eye damage  
 H302 - Harmful if swallowed  
 H336 - May cause drowsiness or dizziness



**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Issue Date** 20-Aug-2019**Revision Date** 20-Aug-2019**Revision Note** Not applicable.**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****End of Safety Data Sheet**