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 18-Sep-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 Light Magenta 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 During normal opening times: 011 397 1429 **Emergency Telephone** 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 - (H335,H336)

Classification according to Directive 67/548/EEC or 1999/45/EC *Full text of R-phrases: see section 16*

Hazard symbols Xi - Irritant

<u>R-code(s)</u> Xi;R41 - Xi;R36 - R67

2.2. Label elements Product identifier Contains gamma-Butyrolactone, Proprietary Acrylic Ester Derivative



Danger

Hazard statements

H318 - Causes serious eye damage May cause respiratory irritation. 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	<50	Eye Irrit. 2 (H319)	No data available
gamma-Butyrolacton e	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
Butoxyethyl acetate	203-933-3	112-07-2	<1	Acute Tox. 4 (H312) Acute Tox. 4 (H332)	No data available

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

General advice	If symptoms persist, call a doctor.
Inhalation	Remove to fresh air. If symptoms persist, call a doctor. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapours.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a doctor. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a doctor. Rinse thoroughly with plenty of water for at least 15

Ingestion	 minutes, lifting lower and upper eyelids. Consult a doctor. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor. 		
Self-protection of the first aider	Use personal protective equipment as required.		
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 for fire fighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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	Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.	

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. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapours/spray.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labelled containers.

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	TWA 50 ppm	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm
monomethyl ether	TWA 308 mg/m ³	TWA: 308 mg/m ³	TWA: 308 mg/m ³	TWA: 308 mg/m ³	TWA: 310 mg/m ³
34590-94-8	*	STEL: 150 ppm	*	vía dérmica*	
		STEL: 924 mg/m ³			
		Sk*			
Butoxyethyl acetate	TWA 20 ppm	TWA: 20 ppm	TWA: 10 ppm	TWA: 20 ppm	TWA: 10 ppm
112-07-2	TWA 133 mg/m ³	TWA: 133 mg/m ³	TWA: 66.5 mg/m ³	TWA: 133 mg/m ³	TWA: 65 mg/m ³
	STEL 50 ppm	STEL: 50 ppm	STEL: 50 ppm	STEL: 50 ppm	H*
	STEL 333 mg/m ³	STEL: 332 mg/m ³	STEL: 333 mg/m ³	STEL: 333 mg/m ³	
	*	Sk*	*	vía dérmica*	
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
gamma-Butyrolactone	-	-	-	TWA: 50 ppm	-
96-48-0				TWA: 14 mg/m ³	
				STEL: 250 ppm	
				STEL: 70 mg/m ³	
				iho*	
Dipropylene glycol	TWA: 50 ppm	TWA: 50 ppm	TWA: 300 mg/m ³	TWA: 50 ppm	TWA: 50 ppm
monomethyl ether	TWA: 308 mg/m ³	TWA: 308 mg/m ³		TWA: 310 mg/m ³	TWA: 309 mg/m ³
34590-94-8	pelle*	STEL: 150 ppm		iho*	H*
		Г			
Butoxyethyl acetate	TWA: 20 ppm	TWA: 20 ppm	TWA: 135 mg/m ³	TWA: 20 ppm	TWA: 20 ppm
112-07-2	TWA: 133 mg/m ³	TWA: 133 mg/m ³	STEL: 333 mg/m ³	TWA: 130 mg/m ³	TWA: 134 mg/m ³
	STEL: 50 ppm	STEL: 50 ppm	H*	STEL: 50 ppm	H*
	STEL: 333 mg/m ³	STEL: 333 mg/m ³		STEL: 330 mg/m ³	
	pelle*	Г	<u> </u>	iho*	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Dipropylene glycol	TWA: 50 ppm	TWA: 50 ppm	STEL: 480 mg/m ³	TWA: 50 ppm	TWA: 50 ppm
monomethyl ether	TWA: 307 mg/m ³	TWA: 300 mg/m ³	TWA: 240 mg/m ³	TWA: 300 mg/m ³	TWA: 308 mg/m ³
34590-94-8	STEL 100 ppm	STEL: 50 ppm		STEL: 75 ppm	STEL: 150 ppm
	STEL 614 mg/m ³ H*	STEL: 300 mg/m ³		STEL: 375 mg/m ³ H*	STEL: 924 mg/m ³ Sk*
Duteursethul e estata		T)///. 40 mm/:		••	
Butoxyethyl acetate	TWA: 20 ppm	TWA: 10 ppm	STEL: 300 mg/m ³	TWA: 10 ppm	TWA: 20 ppm

112-07-2	TWA: 133 mg/m ³ STEL 40 ppm	TWA: 66 mg/m ³ STEL: 20 ppm	TWA: 100 mg/m ³	TWA: 65 mg/m ³ STEL: 15 ppm	TWA: 133 mg/m ³ STEL: 50 ppm
	STEL 270 mg/m ³	STEL: 132 mg/m ³		STEL: 97.5 mg/m ³	STEL: 333 mg/m ³
	H*	H*		H*	Sk*

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Butoxyethyl acetate	-	-	-	-	100 mg/L
112-07-2					150 mg/L
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Butoxyethyl acetate	-	100	-	-	-
112-07-2		200			

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration	No information available.
(PNEC)	

8.2. Exposure controls

Engineering ControlsEnsure adequate ventilation, especially in confined areas.Personal protective equipment
Eye/face protection
Skin and body protectionTight sealing safety goggles. Face protection shield.
Suitable protective clothing. Apron. Gloves made of plastic or rubber.

Environmental exposure controls

ols Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Liquid	Odour	Characteristic
Colour	Light Magenta	Odour threshold	No information available
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash point	<u>Values</u> 100 °C / 212 °F > 100 °C / > 212 °F	Remarks • Method No information available No information available No information available No information available	
Evaporation rate Flammability (solid, gas) Flammability Limit in Air		No information available No information available	
Upper flammability limit: Lower flammability limit Vapour pressure Vapour density Relative density Water solubility Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity	Immiscible in water	No information available No information available	
Explosive properties Oxidising properties	Not an explosive Not applicable		
<u>9.2. Other information</u> Softening point Molecular weight VOC Content (%) Density Bulk density	No information available No information available No information available No information available 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.

Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

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

ATEmix (oral) ATEmix (dermal) 2,309.00 4,565.00

Unknown acute toxicity

98.80299999 % of the mixture consists of ingredient(s) of unknown toxicity.

3.50099999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

3.50099999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

78.80299999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

98.80299999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

78.80299999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

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	= 7070 µL/kg (Rabbit)> 2000	> 5.14 mg/L (Rat)4 h
	(Rat)	mg/kg (Rat)	

gamma-Butyrolactone	= 1540 mg/kg (Rat)		> 5100 mg/m³(Rat)4 h	
Dipropylene glycol monomethyl ether	= 5.35 g/kg (Rat)	= 9500 mg/kg (Rabbit)		
Proprietary Acrylic Ester Derivative	> 215-464 mg/kg (Rat)	= 519 mg/kg (Rabbit)	> 776 ppm (Rat)1 h	
Butoxyethyl acetate	= 2400mg/kg (Rat)	= 1500 mg/kg (Rabbit)	> 400 ppm (Rat) 4 h	
Skin corrosion/irritation	No information available.			
Serious eye damage/eye irritati	on No information available.			
Sensitisation	No information available.			
Germ cell mutagenicity	No information available.			
Carcinogenicity	No information available.			
Reproductive toxicity	No information available.			
STOT - single exposure	No information available.			
STOT - repeated exposure	FOT - repeated exposure No information available.			
Target Organ Effects	Central nervous system, E	Central nervous system, Eyes, Respiratory system.		
Aspiration hazard	No information available.			

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Unknown aquatic toxicity 69.145 % of the mixture consists of component(s) of unknown hazards to the aquatic environment 69.145 % 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
Butoxyethyl acetate	500: 72 h Desmodesmus subspicatus mg/L EC50	-	37: 48 h Daphnia magna mg/L EC50

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
Butoxyethyl acetate	1.51

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

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Improper disposal or reuse of this container may be dangerous and illegal.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

IMDG 14.1 UN/ID no 14.2 Proper Shipping Name 14.3 Hazard Class 14.4 Packing Group 14.5 Marine pollutant 14.6 Special Provisions 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated Not regulated Not regulated Not regulated Not applicable None No information available
<u>RID</u> 14.1 UN/ID no 14.2 Proper Shipping Name 14.3 Hazard Class 14.4 Packing Group 14.5 Environmental hazard 14.6 Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable None
<u>ADR</u> 14.1 UN/ID no 14.2 Proper Shipping Name 14.3 Hazard Class 14.4 Packing Group 14.5 Environmental hazard 14.6 Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable None
IATA 14.1 UN/ID no 14.2 Proper Shipping Name 14.3 Hazard Class 14.4 Packing Group 14.5 Environmental hazard 14.6 Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable 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	RG 84	-
112-36-7		
gamma-Butyrolactone	RG 84	-
96-48-0		
Dipropylene glycol monomethyl ether	RG 84	-
34590-94-8		
Butoxyethyl acetate	RG 84	-
112-07-2		

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

R36 - Irritating to eyes

- R67 Vapours may cause drowsiness and dizziness
- R41 Risk of serious damage to eyes
- R22 Harmful if swallowed

R21/22 - Harmful in contact with skin and if swallowed

R20/21 - Harmful by inhalation and in contact with skin

Full text of H-Statements referred to under section 3

- H312 Harmful in contact with skin
- H332 Harmful if inhaled
- 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 Ceiling	TWA (time-weighted average) Maximum limit value	STEL *	STEL (Short Term Exposure Limit) Skin designation
Issue Date	18-Sep-2019		
Revision Date	18-Sep-2019		
Revision Note	Not applicable.		

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

End of Safety Data Sheet