

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 Black

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
Black Pigment	Listed	-	<5	Not Classified	Not applicable
Proprietary Acrylic Acid Ester	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**

Inhalation	Remove to fresh air.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Ingestion	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 ³ *	TWA: 50 ppm TWA: 308 mg/m ³ STEL: 150 ppm STEL: 924 mg/m ³ Sk*	TWA: 50 ppm TWA: 308 mg/m ³ *	TWA: 50 ppm TWA: 308 mg/m ³ via dérmica*	TWA: 50 ppm TWA: 310 mg/m ³
Black Pigment	-	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	-
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
gamma-Butyrolactone 96-48-0	-	-	-	TWA: 50 ppm TWA: 14 mg/m ³ STEL: 250 ppm STEL: 70 mg/m ³ iho*	-
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 50 ppm TWA: 308 mg/m ³ pelle*	TWA: 50 ppm TWA: 308 mg/m ³ STEL: 150 ppm P*	TWA: 300 mg/m ³	TWA: 50 ppm TWA: 310 mg/m ³ iho*	TWA: 50 ppm TWA: 309 mg/m ³ H*
Black Pigment	-	TWA: 3.5 mg/m ³	-	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 50 ppm TWA: 307 mg/m ³ STEL 100 ppm STEL 614 mg/m ³ H*	TWA: 50 ppm TWA: 300 mg/m ³ STEL: 50 ppm STEL: 300 mg/m ³	STEL: 480 mg/m ³ TWA: 240 mg/m ³	TWA: 50 ppm TWA: 300 mg/m ³ STEL: 75 ppm STEL: 375 mg/m ³ H*	TWA: 50 ppm TWA: 308 mg/m ³ STEL: 150 ppm STEL: 924 mg/m ³ Sk*
Black Pigment	-	-	TWA: 4.0 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3 mg/m ³ STEL: 15 mg/m ³

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**

Physical state	liquid	Odour	Characteristic
Appearance	Liquid	Odour threshold	No information available
Colour	black		

Property	Values	Remarks • Method
pH		No information available
Melting point / freezing point		No information available
Boiling point / boiling range	100 °C / 212 °F	No information available
Flash point	> 100 °C / > 212 °F	No information available

Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limit in Air		
Upper flammability limit:		No information available
Lower flammability limit		No information available
Vapour pressure		No information available
Vapour density		No information available
Relative density		No information available
Water solubility	Immiscible in water	No information available
Solubility(ies)		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties	Not an explosive	
Oxidising properties	Not applicable	

9.2. Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	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)	2,279.00
ATEmix (dermal)	4,380.00

Unknown acute toxicity

- 99.89699999 % of the mixture consists of ingredient(s) of unknown toxicity.
- 4.20099999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 4.20099999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 76.59699999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 99.89699999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
- 76.59699999 % 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 ³ (Rat) 4 h
Dipropylene glycol monomethyl ether	= 5.35 g/kg (Rat)	= 9500 mg/kg (Rabbit)	
Carbon Black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	
N,N-Dimethylacrylamide	> 215-464 mg/kg (Rat)	= 519 mg/kg (Rabbit)	> 776 ppm (Rat) 1 h

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	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	No information available.
Target Organ Effects	Central nervous system, Eyes, Lymphatic System, Respiratory system.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Unknown aquatic toxicity 69.996 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
 69.996 % 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 Desmodemus subspicatus mg/L EC50 79: 96 h Desmodemus subspicatus mg/L	220 - 460: 96 h Leuciscus idus mg/L LC50 static	500: 48 h Daphnia magna Straus mg/L EC50

	EC50		
Dipropylene glycol monomethyl ether	-	10000: 96 h Pimephales promelas mg/L LC50 static	1919: 48 h Daphnia magna mg/L LC50
Black Pigment	10000 mg/l / 3 d scenedesmus subspicatus	1000 mg/l / 96 h Brachydanio rerio)	5600: 24 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

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.

Section 14: TRANSPORT INFORMATION

IMDG

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 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

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

ADR

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

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	-
Black Pigment	RG 16, RG 16bis	-

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

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Revision Note Not applicable.

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

End of Safety Data Sheet