

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 Cleaning Solution

Contains Butoxyethyl acetate, gamma-Butyrolactone

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

Recommended use Cleaning solution as a washing and cleaning preparation for use in digital ink delivery systems and digital print heads.

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

Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Vapours)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 1 - (H318)

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

Full text of R-phrases: see section 16

Hazard symbols

Xn - Harmful

R-code(s)

Xn;R20/21 - Xi;R36

2.2. Label elements

Product identifier

Contains Butoxyethyl acetate, gamma-Butyrolactone



Signal word
Danger

Hazard statements

H312 - Harmful in contact with skin
H318 - Causes serious eye damage
H332 - Harmful if inhaled

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

P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label)
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
Butoxyethyl acetate	203-933-3	112-07-2	85-95	Acute Tox. 4 (H312) Acute Tox. 4 (H332)	No data available
gamma-Butyrolactone	202-509-5	96-48-0	5-10	Acute Tox. 4 (H302) Eye Dam. 1 (H318) STOT SE 3 (H336)	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. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

Inhalation

Remove to fresh air. Call a doctor. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapours. If symptoms persist, call a doctor. Move to fresh air in case of accidental inhalation of vapours or decomposition products.

Skin contact

Consult a doctor if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a doctor.

Eye contact	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. If symptoms persist, call a doctor. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a doctor. 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. Dry chemical. Carbon dioxide (CO2). Water spray (fog). Alcohol resistant foam.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition Risk of ignition

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

Use personal protective equipment as required. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

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. See section 12 for additional ecological information.

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

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimise spreading. Pick up and transfer to

properly labelled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against static discharges.

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

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

General Hygiene Considerations

When using do not eat, drink or smoke. 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 in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Keep away from heat.

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
Butoxyethyl acetate 112-07-2	TWA 20 ppm TWA 133 mg/m ³ STEL 50 ppm STEL 333 mg/m ³ *	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 332 mg/m ³ Sk*	TWA: 10 ppm TWA: 66.5 mg/m ³ STEL: 50 ppm STEL: 333 mg/m ³ *	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 333 mg/m ³ via dérmica*	TWA: 10 ppm TWA: 65 mg/m ³ H*
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Butoxyethyl acetate 112-07-2	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 333 mg/m ³ pelle*	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 333 mg/m ³ P*	TWA: 135 mg/m ³ STEL: 333 mg/m ³ H*	TWA: 20 ppm TWA: 130 mg/m ³ STEL: 50 ppm STEL: 330 mg/m ³ iho*	TWA: 20 ppm TWA: 134 mg/m ³ H*
gamma-Butyrolactone 96-48-0	-	-	-	TWA: 50 ppm TWA: 14 mg/m ³ STEL: 250 ppm STEL: 70 mg/m ³ iho*	-
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Butoxyethyl acetate 112-07-2	TWA: 20 ppm TWA: 133 mg/m ³ STEL 40 ppm STEL 270 mg/m ³ H*	TWA: 10 ppm TWA: 66 mg/m ³ STEL: 20 ppm STEL: 132 mg/m ³ H*	STEL: 300 mg/m ³ TWA: 100 mg/m ³	TWA: 10 ppm TWA: 65 mg/m ³ STEL: 15 ppm STEL: 97.5 mg/m ³ H*	TWA: 20 ppm TWA: 133 mg/m ³ STEL: 50 ppm STEL: 333 mg/m ³ Sk*

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

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. Face protection shield.

Skin and body protection

Suitable protective clothing. Apron. Gloves made of plastic or rubber. Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate. Antistatic footwear.

Environmental exposure controls 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	Odour	Characteristic
Appearance	Liquid	Odour threshold	No information available
Colour	clear		
Property	Values	Remarks • Method	
pH		No information available	
Melting point / freezing point		No information available	
Boiling point / boiling range	145 °C / 293 °F		
Flash point	> 100 °C / > 212 °F		
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	partially soluble		
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

Heat, flames and sparks.

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) 15,556.00 mg/kg

ATEmix (dermal) 1,665.00 mg/kg ppm mg/l

ATEmix (inhalation-vapour) 12.00 mg/l

Unknown acute toxicity

9.9 % of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

9.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Butoxyethyl acetate	= 2400mg/kg (Rat)	= 1500 mg/kg (Rabbit)	> 400 ppm (Rat) 4 h
gamma-Butyrolactone	= 1540 mg/kg (Rat)		> 5100 mg/m ³ (Rat) 4 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	blood, Central nervous system, Eyes, Hematopoietic System, kidney, liver, Respiratory system, Skin.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Butoxyethyl acetate	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	-	37: 48 h <i>Daphnia magna</i> mg/L EC50
gamma-Butyrolactone	360: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 79: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	220 - 460: 96 h <i>Leuciscus idus</i> mg/L LC50 static	500: 48 h <i>Daphnia magna</i> Straus mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient
Butoxyethyl acetate	1.51
gamma-Butyrolactone	-0.566

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	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
Butoxyethyl acetate 112-07-2	RG 84	-
gamma-Butyrolactone	RG 84	-

96-48-0

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 does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances 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 TSCA (United States), Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL), China (IECSC), ENCS (Japan), Philippines (PICCS).

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**

R22 - Harmful if swallowed
 R67 - Vapours may cause drowsiness and dizziness
 R41 - Risk of serious damage to eyes
 R36 - Irritating to eyes
 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
 H302 - Harmful if swallowed
 H318 - Causes serious eye damage
 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