

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (Blue)

EPD-4



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

Recommended use : Marker ink



1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage
Specific target organ toxicity ; single exposure, Category 3 (narcotic effects)	H336 : May cause drowsiness or dizziness

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May cause drowsiness or dizziness

(H225)

(H318)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Avoid breathing vapours.

(P261)

Use only outdoors or in a well-ventilated area.

(P271)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing.

(P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	40 ~ 50	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Propan-2-ol	1 ~ 5	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Titanium dioxide	1 ~ 5	13463-67-7	none	none
Pigment	5 ~ 15	Confidential	none	none
Synthetic resin	1 ~ 10	Confidential	none	none
Others	10 ~ 20	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Consult a doctor if symptoms persist.

IF ON SKIN : Remove / Take off immediately all contaminated clothing. Wash with soap and water.
If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
 Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.
 In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Propan-2-ol	TWA	200 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance : Blue liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 78 ~ 118°C
- Flash point : 17°C (closed cup)
- Relative Density (at 25°C) : 0.8 ~ 1.0 (g/cm³)
- Solubility in Water : Insoluble

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-2-ol]

Oral-rat	LD50	>5,000 mg/kg
Dermal-rabbit	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity : No data available
12.2. Persistence and degradability : No data available
12.3. Bioaccumulative potential : No data available
12.4. Mobility in soil : No data available
12.5. Results of PBT and vPvB assessment : No data available
12.6. Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number ADG, IMDG, IATA : UN1210
14.2. UN proper shipping name ADG, IMDG, IATA : PRINTING INK, flammable
14.3. Transport hazard class(es) ADG, IMDG, IATA :
 · Class 3 (Flammable liquids)
 · Label 3
14.4. Packing group ADG, IMDG, IATA : II
14.5. Environmental hazards Marine pollutant : No
14.6. Special precautions for user EMS Number : F-E,S-D
14.7. HAZCHEM Code : 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice	Preparation of Safety Data Sheets for Hazardous Chemicals
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	Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings are announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)
 EU ELV (DIRECTIVE 2000/53/EC)

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (Fluoro.green)

EPD-4



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

Recommended use : Marker ink



1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage
Specific target organ toxicity ; single exposure, Category 3 (narcotic effects)	H336 : May cause drowsiness or dizziness

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May cause drowsiness or dizziness

(H225)

(H318)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Avoid breathing vapours.

(P261)

Use only outdoors or in a well-ventilated area.

(P271)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing.

(P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	35 ~ 45	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Propan-2-ol	1 ~ 5	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Titanium dioxide	1 ~ 5	13463-67-7	none	none
Pigment	10 ~ 20	Confidential	none	none
Synthetic resin	1 ~ 10	Confidential	none	none
Others	10 ~ 20	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Consult a doctor if symptoms persist.

IF ON SKIN : Remove / Take off immediately all contaminated clothing. Wash with soap and water.
If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
 Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.
 In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Propan-2-ol	TWA	200 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance : Fluoro. green liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 78 ~ 118°C
- Flash point : 17°C (closed cup)
- Relative Density (at 25°C) : 0.8 ~ 1.0 (g/cm³)
- Solubility in Water : Insoluble

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-2-ol]

Oral-rat	LD50	>5,000 mg/kg
Dermal-rabbit	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity : No data available
12.2. Persistence and degradability : No data available
12.3. Bioaccumulative potential : No data available
12.4. Mobility in soil : No data available
12.5. Results of PBT and vPvB assessment : No data available
12.6. Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number ADG, IMDG, IATA : UN1210
14.2. UN proper shipping name ADG, IMDG, IATA : PRINTING INK, flammable
14.3. Transport hazard class(es) ADG, IMDG, IATA :
 · Class 3 (Flammable liquids)
 · Label 3
14.4. Packing group ADG, IMDG, IATA : II
14.5. Environmental hazards Marine pollutant : No
14.6. Special precautions for user EMS Number : F-E,S-D
14.7. HAZCHEM Code : 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice

Preparation of Safety Data Sheets for Hazardous Chemicals

	Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings are announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)
EU ELV (DIRECTIVE 2000/53/EC)

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (Fluoro.orange)

EPD-4



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

Recommended use : Marker ink

1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage
Specific target organ toxicity ; single exposure, Category 3 (narcotic effects)	H336 : May cause drowsiness or dizziness

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May cause drowsiness or dizziness

(H225)

(H318)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Avoid breathing vapours.

(P261)

Use only outdoors or in a well-ventilated area.

(P271)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing.

(P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	35 ~ 45	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Propan-2-ol	1 ~ 5	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Titanium dioxide	1 ~ 5	13463-67-7	none	none
Pigment	10 ~ 20	Confidential	none	none
Synthetic resin	1 ~ 10	Confidential	none	none
Others	10 ~ 20	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.

IF ON SKIN : Remove / Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
 Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.
 In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Propan-2-ol	TWA	200 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance : Fluoro. orange liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 78 ~ 118°C
- Flash point : 17°C (closed cup)
- Relative Density (at 25°C) : 0.8 ~ 1.0 (g/cm³)
- Solubility in Water : Insoluble

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-2-ol]

Oral-rat	LD50	>5,000 mg/kg
Dermal-rabbit	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity : No data available
12.2. Persistence and degradability : No data available
12.3. Bioaccumulative potential : No data available
12.4. Mobility in soil : No data available
12.5. Results of PBT and vPvB assessment : No data available
12.6. Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number ADG, IMDG, IATA : UN1210
14.2. UN proper shipping name ADG, IMDG, IATA : PRINTING INK, flammable
14.3. Transport hazard class(es) ADG, IMDG, IATA :
 · Class 3 (Flammable liquids)
 · Label 3
14.4. Packing group ADG, IMDG, IATA : II
14.5. Environmental hazards Marine pollutant : No
14.6. Special precautions for user EMS Number : F-E,S-D
14.7. HAZCHEM Code : 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice

Preparation of Safety Data Sheets for Hazardous Chemicals

	Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)
 EU ELV (DIRECTIVE 2000/53/EC)

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (Fluoro.pink)

EPD-4



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

Recommended use : Marker ink



1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage
Specific target organ toxicity ; single exposure, Category 3 (narcotic effects)	H336 : May cause drowsiness or dizziness

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May cause drowsiness or dizziness

(H225)

(H318)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Avoid breathing vapours.

(P261)

Use only outdoors or in a well-ventilated area.

(P271)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing.

(P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	35 ~ 45	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Propan-2-ol	1 ~ 5	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Titanium dioxide	1 ~ 5	13463-67-7	none	none
Pigment	10 ~ 20	Confidential	none	none
Synthetic resin	1 ~ 10	Confidential	none	none
Others	10 ~ 20	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Consult a doctor if symptoms persist.

IF ON SKIN : Remove / Take off immediately all contaminated clothing. Wash with soap and water.
If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
 Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.
 In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Propan-2-ol	TWA	200 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance : Fluoro. pink liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 78 ~ 118°C
- Flash point : 17°C (closed cup)
- Relative Density (at 25°C) : 0.8 ~ 1.0 (g/cm³)
- Solubility in Water : Insoluble

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-2-ol]

Oral-rat	LD50	>5,000 mg/kg
Dermal-rabbit	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity : No data available
12.2. Persistence and degradability : No data available
12.3. Bioaccumulative potential : No data available
12.4. Mobility in soil : No data available
12.5. Results of PBT and vPvB assessment : No data available
12.6. Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number ADG, IMDG, IATA : UN1210
14.2. UN proper shipping name ADG, IMDG, IATA : PRINTING INK, flammable
14.3. Transport hazard class(es) ADG, IMDG, IATA :
 · Class 3 (Flammable liquids)
 · Label 3
14.4. Packing group ADG, IMDG, IATA : II
14.5. Environmental hazards Marine pollutant : No
14.6. Special precautions for user EMS Number : F-E,S-D
14.7. HAZCHEM Code : 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice

Preparation of Safety Data Sheets for Hazardous Chemicals

	Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)
 EU ELV (DIRECTIVE 2000/53/EC)

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (Fluoro.yellow)

EPD-4



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

Recommended use : Marker ink



1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage
Specific target organ toxicity ; single exposure, Category 3 (narcotic effects)	H336 : May cause drowsiness or dizziness

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May cause drowsiness or dizziness

(H225)

(H318)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Avoid breathing vapours.

(P261)

Use only outdoors or in a well-ventilated area.

(P271)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing.

(P304+P340)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	30 ~ 40	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Propan-2-ol	1 ~ 5	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Titanium dioxide	1 ~ 5	13463-67-7	none	none
Pigment	10 ~ 20	Confidential	none	none
Synthetic resin	1 ~ 10	Confidential	none	none
Others	15 ~ 25	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.

IF ON SKIN : Remove / Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

IF SWALLOWED : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
 Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.
 When a fire extends, fire is extinguished by a large amount of water spray.
 Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.
 Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.
 No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.
 In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Propan-2-ol	TWA	400 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Propan-2-ol	TWA	200 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
- Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
- Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
- Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- Appearance : Fluoro. yellow liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 78 ~ 118°C
- Flash point : 17°C (closed cup)
- Relative Density (at 25°C) : 0.8 ~ 1.0 (g/cm³)
- Solubility in Water : Insoluble

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-2-ol]

Oral-rat	LD50	>5,000 mg/kg
Dermal-rabbit	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity : No data available
12.2. Persistence and degradability : No data available
12.3. Bioaccumulative potential : No data available
12.4. Mobility in soil : No data available
12.5. Results of PBT and vPvB assessment : No data available
12.6. Other adverse effects : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number ADG, IMDG, IATA : UN1210
14.2. UN proper shipping name ADG, IMDG, IATA : PRINTING INK, flammable
14.3. Transport hazard class(es) ADG, IMDG, IATA :
 · Class 3 (Flammable liquids)
 · Label 3
14.4. Packing group ADG, IMDG, IATA : II
14.5. Environmental hazards Marine pollutant : No
14.6. Special precautions for user EMS Number : F-E,S-D
14.7. HAZCHEM Code : 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice

Preparation of Safety Data Sheets for Hazardous Chemicals

	Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings are announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)
 EU ELV (DIRECTIVE 2000/53/EC)

Safety Data Sheet

according to Safe Work Australia document

"Model Code of Practice : Preparation of safety data sheets for hazardous chemicals"

Issued Date : 19 July 2013

Revised Date : 13 December, 2023

SECTION 1: Identification ; Chemical product and company identification

1.1. Product identifier

Product Name : Artline Opaque Ink Board Marker Colour : (White)

EPD-4



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

Recommended use : Marker ink



1.3. Details of the supplier of the safety data sheet

Supplier	Company Name	: ACCO Brands Australia Pty Ltd
	Address	: 2 Coronation Avenue, Kings Park, 2148 NSW, Australia
	Phone	: 02 9674 0900 (9am to 5pm AEST, Monday to Friday)
	Contact (e-mail)	: sds.anz@acco.com
	Website	: www.accobrand.com.au
Manufacturer	Company Name	: Shachihata Inc.
	Address	: 4-69, Amazuka-cho, Nishi-ku, Nagoya City, 451-0021, Japan
	Phone	: +81-52-521-3600
	Fax	: +81-52-521-3899
	Contact	: https://www.artlineworld.com/contact/



1.4. Emergency telephone number

Poisons Information Centre : 13 11 26

SECTION 2: Hazards identification

Hazardous Substance , Dangerous Goods.

Classified as hazardous according to the criteria of Safe Work Australia (SWA - formerly NOHSC),
and as Dangerous Goods according to the Australian Dangerous Goods (ADG) Code for Transport by Road and Rail.

2.1. Classification of the substance or mixture

2.1.1. Classification (SWA)

Flammable liquids, Category 2	H225 : Highly flammable liquid and vapour
Serious eye damage, Category 1	H318 : Causes serious eye damage

2.2. Label elements

Labelling (SWA)

Symbols :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage

(H225)

(H318)

Precautionary statement

【Prevention】

Keep out of reach of children.

(P102)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(P210)

Take precautionary measures against static discharge.

(P243)

Wear eye protection.

(P280)

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P370+P378)

IF IN EYES : Rinse cautiously with water for several minutes.

(P305+P351+P338)

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists : Get medical advice and attention.

(P337+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Ethyl alcohol	45 ~ 55	64-17-5	Flam. Liq. 2	H225
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Butan-1-ol	1 ~ 10	71-36-3	Flam. Liq. 3 Acute Tox.(oral) 4 Skin Irrit. 2 Eye Dam. 1 STOT. SE. 3	H226 H302 H315 H318 H335+H336
Titanium dioxide	5 ~ 15	13463-67-7	none	none
Synthetic resin	5 ~ 15	Confidential	none	none
Others	5 ~ 15	Confidential	none	none
total	100			

SECTION 4: First-aid measures

4.1. Description of first aid measures

- IF INHALED** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
- IF ON SKIN** : Remove / Take off immediately all contaminated clothing. Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
- IF IN EYES** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
- IF SWALLOWED** : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly. Moreover, do not give anything from the mouth to the patient when not conscious. Receive the doctor's treatment (stomach pump) promptly.

SECTION 5: Firefighting-measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide

Unsuitable extinguishing media : Water jet

5.2. Special hazards arising from the substance or mixture

For initial stage extinction, carbon dioxide or dry chemical powder.

When a fire extends, fire is extinguished by a large amount of water spray.

Do not discharge extinguishing waters into the aquatic environment.

5.3. Advice for firefighters

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.

Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe area. Shut off all sources of ignition.

No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth, etc.), and then wipe off the waste well with waste cloth, and rag.

In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.) and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Australian exposure standards (2019)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Butan-1-ol	TWA	50 ppm
Titanium dioxide	TWA	10 mg/m ³

EH40/2005 Workplace exposure limits (Fourth Edition, published 2020)

Ethyl alcohol	TWA	1,000 ppm
Propan-1-ol	TWA	200 ppm
Butan-1-ol	STEL	50 ppm
Titanium dioxide	TWA	10 mg/m ³

ACGIH (2019)

Ethyl alcohol	STEL	1,000 ppm
Propan-1-ol	TWA	100 ppm
Butan-1-ol	TWA	20 ppm
Titanium dioxide	TWA	10 mg/m ³

8.2. Exposure controls

Personal protective equipment

Respiratory Protection : Use with local exhaust ventilation, when in long use.
 Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
 Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
 Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
 Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : White liquid

Odour	: Minor solvent odour
pH	: Not applicable
Boiling point	: 78 ~ 118°C
Flash point	: 17°C (closed cup)
Relative Density (at 25°C)	: 0.8 ~ 1.0 (g/cm ³)
Solubility in Water	: Insoluble

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : LD/LC50 values that are relevant for classification

[Ethyl alcohol]

Oral-rat	LD50	>5,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Propan-1-ol]

Oral-rat	LD50	>2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

[Butan-1-ol]

Oral-rat	LD50	>300 - <=2,000 mg/kg
Dermal-rabbit	LD50	>2,000 mg/kg
Inhalation-rat	LC50	>20 mg/L/4h

Serious eye damage : Category 1 Causes serious eye damage

Carcinogenicity : Titanium dioxide has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered
a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

Regarding the carcinogenicity of titanium dioxide, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH (American Conference of Governmental Industrial Hygienists), EPA (Environmental Protection Agency), EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

12.1. Toxicity	: No data available
12.2. Persistence and degradability	: No data available
12.3. Bioaccumulative potential	: No data available
12.4. Mobility in soil	: No data available
12.5. Results of PBT and vPvB assessment	: No data available
12.6. Other adverse effects	: No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14: Transport information

Determination of whether a Dangerous Good based on ADG Code criteria.

UN Numbers listed as "UN" followed by 4 digits.

Dangerous Good Classes and Labels for all Dangerous Goods.

Special Provisions listed.

Road – ADG – Australian Dangerous Goods Code (Road and Rail)

Air – IATA – International Air Transport Association

Sea – IMDG – International Maritime Dangerous Goods

14.1. UN number	ADG, IMDG, IATA	: UN1210
14.2. UN proper shipping name	ADG, IMDG, IATA	: PRINTING INK, flammable
14.3. Transport hazard class(es)	ADG, IMDG, IATA	:
	· Class	3 (Flammable liquids)
	· Label	3
14.4. Packing group	ADG, IMDG, IATA	: II
14.5. Environmental hazards	Marine pollutant	: No
14.6. Special precautions for user	EMS Number	: F-E,S-D
14.7. HAZCHEM Code		: 3YE (ADG7)



SECTION 15: Regulatory information

This product does not contain any hazardous chemical that has been determined by Montreal Protocol (Ozone depleting substances), The Stockholm Convention (Persistent Organic Pollutants), and The Rotterdam Convention (Prior Informed Consent).

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

Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

References

Model Code of Practice	Preparation of Safety Data Sheets for Hazardous Chemicals Labelling of Workplace Hazardous Chemicals
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
Safe Work Australia HSIS	http://hsis.safeworkaustralia.gov.au/HazardousSubstance
WES	Workplace Exposure Standards for Airborne Contaminants (2019)
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail Edition 7.6, 2018



This data sheet may not be enough when evaluating danger or hazard. The above information, which is created from currently available documents, information and data, may be revised when new findings announced. This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency. When handling as a normal product, please refer to the notes that is described in the produce or packaging. The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.

EU RoHS (Directive 2011/65/EU)

EU ELV (DIRECTIVE 2000/53/EC)