

S-Phrase	R67	Vapours may cause drowsiness and dizziness.
	S2	Keep out of the reach of children.
	S7	Keep container tightly closed.
	S16	Keep away from sources of ignition - No smoking.
	S24	Avoid contact with skin.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S39	Wear eye/face protection.

Symbols and indications of danger specific F : Highly flammable Xi : Irritant

COMPOSITION / INFORMATION ON INGREDIENTS (INK)

Chemical Name / Generic name	Composition weight %					CAS Registry No.
	Black	Blue,Red	Green,Orange, Pink	Purple	Yellow green, Light blue	
Ethyl alcohol	20 ~ 30	30 ~ 40	35 ~ 45	45 ~ 55	20 ~ 30	64-17-5
Propan-2-ol	30 ~ 40	35 ~ 45	30 ~ 40	30 ~ 40	30 ~ 40	67-63-0
Propan-1-ol	20 ~ 30	5 ~ 15	5 ~ 15	—	20 ~ 30	71-23-8
Carbon black	1 ~ 10	—	—	—	—	1333-86-4

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.

FIRE FIGHTING MEASURES

Extinguishing media

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

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.

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.

ACCIDENTAL RELEASE MEASURES

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.

Environmental precautions

Do not throw the leakage thing directly into environment

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.

HANDLING AND STORAGE

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.

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.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Australian exposure standards(2013)

Ethyl alcohol	TWA	1000ppm
Propan-2-ol	TWA	400ppm
Propan-1-ol	TWA	200ppm
Carbon black	TWA	3 mg/m ³

EH40/2005 Workplace exposure limits

Ethyl alcohol	TWA	1000ppm
Propan-2-ol	TWA	400ppm
Propan-1-ol	TWA	200ppm
Carbon black	TWA	3.5 mg/m ³

ACGIH (2015)

Ethyl alcohol	STEL	1000ppm
Propan-2-ol	TWA	200ppm
Propan-1-ol	TWA	100ppm
Carbon black	TWA	3 mg/m ³

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.

PHYSICAL AND CHEMICAL PROPERTIES (INK)

Appearance	: liquid
Odour	: minor solvent odour
pH	: Not applicable
Boiling point	: No data available
Flash point	: 13 °C (closed cup)
Relative Density (at 25°C)	: 0.8 ~ 0.85 (g/cm ³)
Solubility in Water	: Insoluble

STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Thermally stable at typical use temperatures.

Possibility of hazardous reactions

No data available

Conditions to Avoid

High temperature, Direct sunlight, Fire

Incompatible Materials

No data available

Hazardous decomposition products

CO, CO₂

TOXICOLOGICAL INFORMATION

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-2-ol]

Oral-rat LD50 >5,000mg/kg

Dermal-rabbit LD50 >5,000mg/kg

Inhalation-rat LC50 >20 mg/L/4h

[Propan-1-ol]

Oral-rat LD50 >2,000mg/kg

Dermal-rabbit LD50 >2,000mg/kg

Inhalation-rat LC50 >20 mg/L/4h

Carcinogenicity : Carbon black 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 carbon black, 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.

ECOLOGICAL INFORMATION

Ecotoxicity	: No data available
Persistence and degradability	: No data available

Bioaccumulative potential	: No data available
Mobility in soil	: No data available
Other adverse effects	: No data available

DISPOSAL CONSIDERATIONS

Disposal 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.

TRANSPORT INFORMATION

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



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Artline Sureme Whiteboard Marker (EPF-507) is not a hazardous material by the special provision.

Artline Sureme Whiteboard Marker (EPF-507) (Amount of ink : less than 10ml)

UN number	: UN3175
UN proper shipping name	: Solids containing Flammable Liquid. n.o.s.
IATA	Special Provision A46
IMDG Code	Special Provision 216
ADG	Special Provision 216

According to IATA Special Provision A46, and IMDG Code Special Provision 216, small inner packagings consisting of sealed packets and articles containing less than 10 mL of a Class 3 liquid in Packing Group II or III absorbed onto a solid material are not subject to as a hazardous material/dangerous goods provided there is no free liquid in the packet or article.

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).

OTHER INFORMATION

Contact Point : Mr. C Watt , Product Manager , Phone(02-9674-0900) Fax(02-9674-0910)

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.