## SAFETY DATA SHEET

Waterborne Double-Line Ink(Dark Blue)

Version 1.0

Issue date: 14/04/2021

Revision date: 14/04/2021 SDS Record Number: CSSS-TCO-010-132244

#### 1. Identification

GHS product identifier: Waterborne Double-Line Ink(Dark Blue)

Other means of identification: See section 3

Recommended use of the chemical and restrictions on use:

Recommended use: Pen

Recommended Restrictions: Not available

Supplier's details:

Supplier(Manufacturer): Ningbo Lofos Stationery Co., Ltd.

Address: No.529, Mingzhou West Road, Xinqi, Beilun District, Ningbo City

 Contact person(E-mail):
 20683554@qq.com

 Telephone:
 +86-13567898875

Fax:

Emergency phone number: +86-13567898875

#### 2. Hazards identification

Classification of the substance or mixture:

Physical hazards: Flammable liquids Category 2

Health hazards:

Environmental hazards:

Not classified

Not classified

GHS label elements, including precautionary statements:

Hazard Pictograms: :

Signal word: Danger

Hazard statement: Highly flammable liquid and vapour

**Precautionary statement:** 

**Prevention:** Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of soap and water.

In case of fire: Use dry chemical, alcohol resistant foam or carbon dioxide, water spray

to extinguish.

**Storage:** Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container in accordance with local regulation.

Other hazards which do not result in

classification:

Not applicable

## 3. Composition/information on ingredients

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	CAS No.	EC No.	Concentration
Aluminum powder	7429-90-5	231-072-3	5%
Proprylene glycol monomethyl ether	107-98-2	203-539-1	10%
ethanol	64-17-5	200-578-6	84%
Solvent Blue 67	12226-78-7	N/A	1%

#### 4. First aid measures

Description of necessary first-aid measures:

Inhalation: Move subject to fresh air and keep him calm. In case of complaints get medical

treatment.

Skin: Remove contaminated clothing immediately and wash skin with soap and water.

Eye: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses

and open eyes wide apart. Get medical attention promptly if symptoms occur after

washing.

Immediately rinse mouth and drink plenty of water. Keep person under observation. If

person becomes uncomfortable seek hospital and bring these instructions.

The product is not classified as harmful to human health effect.

Most important symptoms/effects,

acute and delayed:

Indication of immediate medical

attention and special treatment needed,

if necessary:

### 5. Fire-fighting measures

Suitable extinguishing media: Dry chemical, alcohol resistant foam or carbon dioxide, water spray.

Treat symptomatically.

**Unsuitable extinguishing media:** Not available.

Specific hazards arising from the

chemical:

In case of fire, the following can be released: carbon monoxide, carbon dioxide.

in case of me, the following can be released: carbon monoxide, carbon dioxide.

Special protective actions for

fire-fighters:

Protective equipment for fire-fighters, Self-contained breathing apparatus. Use

air-supplied respirator, gloves and protective goggles.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Provide adequate ventilation. Avoid breathing vapors, mist or gas. Evacuate personnel

to safe areas. Refer to section 8 of SDS for personal protection details.

For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if vapor is generated.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment Pick

and cleaning up:

Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder,

kieselguhr). Dispose of absorbed material in accordance with regulations.

### 7. Handling and storage

Precautions for safe handling: Provide good ventilation. Avoid breathing vapor or mist. Prevent electrostatic charge -

sources of ignition should be kept well clear - fire extinguishers should be kept handy. Do not taste or swallow. Avoid contact with skin and eyes. Avoid prolonged exposure. Do not get this material on clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke.

Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Store in tightly closed original container in a dry, cool and well-ventilated place. Do not store near heat sources or expose to high temperatures.

## 8. Exposure controls/personal protection

#### **Control parameters:**

				Occupation	al Exposure	Occupat	ional Exposu	ıre Limit
				Limit Valu	ıe (8-hour	Value (1	15-minute ref	erence
				referenc	e period)		period)	
Country	Substance	EINECS No.	CAS No.	ppm	mg/ m3	ppm	mg/ m3	Note
	Aluminium metal; total inhalable dust respirable dust welding fume	231-072-3	7429-90-5	-	10 4 5	-	-	- - -
Ireland	Ethanol	200-578-6	64-17-5	1000	1900	-	-	-
Ireland	Propylene glycol monomethyl ether	203-539-1	107-98-2	50	184	100	368	IOELV

Appropriate engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility

and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Individual protection measures, such as personal protective equipment (PPE):

Eye/face protection:Chemical safety goggles.Skin protection:Wear normal working clothing.Respiratory protection:Wear approved mask/respirator.

**Thermal hazards:** Wear suitable protective clothing to prevent heat.

## 9. Physical and chemical properties and safety characteristics

Appearance:

Physical state: Liquid
Form: Liquid
Color: Dark Blue
Odor: Not available

Melting point/ freezing point: -97.8 °C(CAS# 64-17-5)

Boiling point or initial boiling point and 64.7 °C(CAS# 64-17-5)

boiling range:

Flammability: Not available

Lower and upper explosion limit / 2.5 %/13.5%(CAS# 64-17-5)

flammability limit:

Flash point: 9.7 °C(CAS# 64-17-5) Auto-ignition temperature: 455 °C(CAS# 64-17-5)

**Decomposition temperature:**Not available

PH:

Not available

Viscosity: 0.544 - 0.59 mPa s (25°C,CAS# 64-17-5)
Solubility: >= 1 000 g/L(20°C,CAS# 64-17-5)

Partition coefficient n-octanol/water (log -0.77(CAS# 64-17-5)

value):

 Vapor pressure:
 169.27 hPa(25°C,CAS# 64-17-5)

 Density and/or relative density:
 0.79 - 0.8(20 °C,CAS# 64-17-5)

Relative vapour density:

Particle characteristics:

Molecular weight:

Not available

Not available

Not available

## 10. Stability and reactivity

Reactivity: The substance is stable under normal storage and handling conditions.

Chemical stability: Material is stable under normal conditions

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

**Conditions to avoid:** Contact with incompatible materials.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide.

### 11. Toxicological information

Acute toxicity:

Ethanol(CAS# 64-17-5)

LD50(Oral, Rat): 10 470 mg/kg bw LD50(Dermal, Rabbit): Not available. LC50(Inhalation, Rat): 124.7 mg/L,4H Skin corrosion/Irritation: Not classified Serious eye damage/irritation: Not classified Respiratory or skin sensitization: Not classified Germ cell mutagenicity: Not classified Carcinogenicity: Not classified Reproductive toxicity: Not classified STOT- single exposure: Not classified STOT-repeated exposure: Not classified Not classified Aspiration hazard:

## 12. Ecological information

**Toxicity:** 

Ethanol(CAS# 64-17-5)

Acute t	oxicity	Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	275 mg/L	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

No data available.

No data available.

No data available.

### 13. Disposal considerations

**Disposal methods:** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Dispose of in accordance with local regulations. Empty containers or liners may retain

some product residues.

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	1993	1993	1993
UN Proper shipping name	FLAMMABLE LIQUID,	FLAMMABLE LIQUID,	FLAMMABLE LIQUID,
The state of the s	N.O.S.(ethanol)	N.O.S.(ethanol)	N.O.S.(ethanol)

Transport hazard class(es)	3	3	3
Packing group, if applicable	II	II	II
Environmental hazards	No	No	No
Special precautions for user	See section 2	See section 2	See section 2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	IBC02	IBC02	IBC02

# 15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

## 16. Other information

The date of preparation of the	Version 1.0 Amended by GHS rev 6 on Aug.16 <sup>th</sup> ,2019	
latest revision of the SDS:		
Legend to abbreviations and	ADR: European Agreement Concerning the International Carriage of Dangerous Goods by	
acronyms used in the SDS:	Road	
	RID: Regulations Concerning the International Transport of Dangerous Goods by Rail	
	(European law)	
	IMDG: International Maritime Dangerous Goods	
	EINECS: European Inventory of Existing commercial Chemical Substances	
	IATA: International Air Transport Association	
	ICAO-TI: International Civil Aviation Organization 《The International Civil Aviation Covenant》	
	(ICAO)	
	CAS: Chemical Abstracts Service	
	LC50: Lethal Concentration 50	
	EC50: Concentration for 50% of maximal effect	

References and sources for data used to compile the SDS:

The European Chemicals Agency

LD50: Lethal dose 50%

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).