

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.09.2016

### 1. Identification of the substance/preparation and of the company/undertaking

#### 1.1 Product identifier

Trade name: SGS2 Eco-solvent Pigment ink

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

Material of Use: Industrial applications: Inkjet ink for drop-on-demand digital printing process.

#### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Gongzheng Group Co., Ltd

Address: Five-Star Industrial Zone, Oubei Town, Yongjia County, Zhejiang Province, China 325105

Phone: +86-577-67319778

e-mail: gzsales@gongzheng.com

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Danger

Acute Tox. 4 H302 Harmful if swallowed.

Acute tox 4: H312 Harmful in contact with skin.

Eye Irrit. 2 H318 Causes serious eye irritation.

Acute tox 4: H332 Harmful if inhaled.

STOT SE 3: H336 May cause drowsiness or dizziness.

HMIS III Ratings: Health: 2 Fire: 2 Physical Hazard: 1 Pers. Prot.: H

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

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



Harmful Xn: R20/21/22 R41;R67

R phrases: 20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R phrases: 41: Risk of serious damage to eyes.

R phrases: 67: Vapours may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment: Not applicable.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



Signal word: Danger

Hazard statements:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H318 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## 3. Composition/information on ingredients

Chemical characterization: Mixture

Ink Jet printing ink in organic solvents.

Chemical Name	Percent %	CAS- No.	EINECS	EU registration No.	Classification	
					67/548/EEC	Regulation (EC)No. 1272/2008 (CLP)
2-Ethoxyethyl ether	20-30	112-36-7	203-963-7	Not available for the moment	--	--
Diethylene glycol ethyl methyl ether	40-50	1002-67-1	213-690-5	Not available for the moment	--	--
Gamma-Butyrolactone	10-20	96-48-0	202-509-5	Not available for the moment	Xi;R22,R41 R67	Acute Tox.4 H302 Eye Irrit.2 H318 STOT.SE3 H336
Proprietary pigment	< 6	--	--	Not available for the moment	--	--

## 4. First aid measures

### 4.1 Description of first aid measures

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **5. Fire-fighting measures**

### **5.1 Extinguishing media**

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides

### **5.3 Advice for firefighters**

Use breathing apparatus with independent air supply.

Protective suit.

### **5.4 Further information**

Use water spray to cool unopened containers

### **5.5 NFPA Ratings: Health: 2 Flammability: 2 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## **6. Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **7. Handling and storage**

### **7.1 Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### **7.3 Specific end uses**

no data available

## **8. Exposure controls/personal protection**

### **8.1 Control parameters**

Components with workplace control parameters

### **8.2 Exposure controls**

Components	ACGIH: TWA
Ethylene Glycol Monobutyl Ether Acetate	20 ppm

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

##### **Wash and dry hands.**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. Physical and chemical properties

1	Color	Cyan,Magenta,Yellow,Black
2	Odor	Slight odor
3	Boiling point/boiling range of ink	approx. 174 °C or higher
4	Melting Point/Melting Range	No data available
5	Flash point of ink	approx. 68 °C
6	Auto-Ignition Temperature	not below 220 °C
7	Flammability(solid, gas)	Not Applicable
8	Explosive Properties	Lower limits: 2.7 vol% Upper limits: 15.6 vol% (gamma-Butyrolactone) Lower limits: 0.88 vol% Upper limits: 8.54 vol% (Ethylene Glycol Monobutyl Ether Acetate)
9	Vapour Pressure	No data available
10	Solubility	0.98 ± 0.01(25°C)
11	Solubility	No data available
12	Water solubility	Easily soluble (Diethylene glycol diethyl ether)
13	Viscosity	4.3 ± 0.5 cps
14	pH	Not applicable
15	Oxidizing properties	No data available
16	Vapor Density	Not Applicable

The Physical and chemical data given in Section 9 are typical values for this product and are not intended to be product specifications.

## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong bases

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

## 11. Toxicological information

### 11.1 Information on toxicological effects

**Routes of Overexposure:** Eye, skin, inhalation, and oral ingestion

**Acute Health Hazards:** Overexposure of the eye surface to ink may be mildly irritating. Overexposure of ink contact with the skin may cause irritation and in some people, swelling and redness. Intentional inhalation to ink vapors may result in respiratory tract irritation. Intentional or accidental oral ingestion may cause an upset stomach.

**Chronic Health Hazards:** No information available

Mutagenicity: No information available

Carcinogenicity: No information available

Acute Toxicity Data:

**2-Ethoxy Ethyl Ether:**

LD50/LC50: Draize test, rabbit, eye: 50 mg Moderate; Oral, rat: LD50 = 4970 mg/kg; Skin, rabbit: LD50 = 6700 uL/kg.

**Dipropylene Glycol Monomethyl Ether:**

LD50/LC50: Oral, rat: LD50 = 5130 mg/kg; Dermal, rabbit: LD50 = 9500 mg/kg

**Diethylene Glycol Derivative:**

Oral LD50 >6,500mg/kg (Rats), Dermal LD50 >7,070mg/kg (Rabbit)

**Tetraethylene Glycol Dimethyl Ether:**

LD50/LC50: Draize test, rabbit, eye: 500 mg Mild; Oral, rat: LD50 = 5140 mg/kg.

**Gamma-Butyrolactone:**

LD50/LC50: Dermal, guinea pig: LD50 = >5 gm/kg; Draize test, rabbit, skin: 500 uL Severe; Inhalation, rat: LC50 = >5100 mg/m<sup>3</sup>/4H; Oral, mouse: LD50 = 1460 mg/kg; Oral, rat: LD50 = 1540 mg/kg.

**Ethylene Glycol Monobutyl Ether Acetate:**

LD50/LC50: Draize test, rabbit, eye: 500 mg/24H Mild; Oral, mouse: LD50 = 3200 mg/kg; Oral, rat: LD50 = 2400 mg/kg; Skin, rabbit: LD50 = 1500 mg/kg.

**Inhalation:**

Not available

**Irritating:**

**Ethylene Glycol Monobutyl Ether Acetate:**

Eye irritating: 500mg/24hrs (Rabbit OECD405) mild irritating.

Skin irritating: 500mg/24hrs (open@ Rabbit OECD404) mild irritating.

**Diethylene Glycol Ethyl Methyl Ether:**

Eye irritating: moderate irritant(P.I.I=2.5 Draize)

**Gamma-Butyrolactone:**

Irritating to eyes. (rabbit eyes, OECD Guideline 405)

**Sensitization:**

Not available

**Mutagenicity:**

Not available

The information shown in SECTION 3, Hazards identification, is based on toxicity profiles of similar materials or on the components present in this material.

## **12. Ecological information**

### **12.1 Toxicity**

Acquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

### **12.5 Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

## **13. Disposal considerations**

### **13.1 Waste treatment methods**

**Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## **14. Transport information**

### **14.1 UN number**

ADR/RID: —                      IMDG: —                      IATA: —

### **14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: —                      IMDG: —                      IATA: —

#### 14.4 Packaging group

ADR/RID: —                      IMDG: —                      IATA: —

#### 14.5 Environmental hazards

ADR/RID: no                      IMDG Marine pollutant: no                      IATA: no

#### 14.6 Special precautions for user

no data available

### **15. Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH)

REACH Status: In compliance.

Pre-registration status: All components are listed or exempted.

Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

#### 15.2 Chemical Safety Assessment

No data available

#### 15.3 Other information

US Regulation:

TSCA Section 4(a) Final Test Rules Regulated: Not regulated.

TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR): Not regulated.

TSCA Section 8(a) Inventory Update Rule: All components on TSCA INVENTORY

TSCA Section 8(d) Health and Safety Study Reporting: Not regulated.

TSCA Section 12(b) One-Time Export Notification Regulated: Not regulated.

California Proposition 65: Not regulated.

### **16. Other information**

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.