according to Regulation (EC) No. 1907/2006

Product name : Heatless Invisible Ink BLUE IQ249S Date Prepared : SDS Number : Revision Date :

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

1.1 Product identifier

Product name : Heatless Invisible Ink BLUE IQ249S

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

Use of the substance/mixture : Ink for ink jet printer

1.3 Details of the supplier of the safety data sheet

Company : GENERAL CO., LTD.

18, Satsukigaoka, Minakuchi-cho, Koka-shi, Siga 528-0062, Japan

Telephone : +81-748-65-2260
Fax : +81-748-63-1922
E-mail : qa\_1@general.co.jp

1.4 Emergency telephone number : +81-748-65-2260

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

: Flam. Liq. 2 Eye Dam. 1 STOT SE 3

#### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms :







Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.

Causes serious eye damage.

May cause drowsiness or dizziness.

Precautionary statements

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.

Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Response : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

In case of fire: Use an appropriate extinguishing agent for extinction.

IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Call a POISON CENTER of doctor/physician if you feel unwell.

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

lenses, if present and easy to remove. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

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

Store locked up.

Disposal : Dispose of contents/container in accordance with

local/regional/national/international regulations.

2.3 Other hazards

None known

## 3. Composition/information on ingredients

3.1 Chemical characterization : Mixture

3.2 Ingredients

Components	CAS No.	EC Number	Contents (wt %)	Classification (EC) No 1272/2008
Fluorescent dye	Confidential	Confidential	< 2	Not classified
Ethanol	64-17-5	200-578-6	< 70	Flam. Liq. 2: H225
1-Propanol	71-23-8	200-746-9	< 25	Flam. Liq. 2: H225 Eye Dam. 1: H318 STOT SE 3: H336
Acetone	67-64-1	200-662-2	< 3	Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H336
1-Butanol	71-36-3	200-751-6	< 2	Flam. Liq. 3: H226 Acute Tox. 4: H302 Skin Irrit. 2: H315 Eye Dam. 1: H318 STOT SE 3: H335, H336

## 4. First aid measures

4.1 Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical advice.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

Get medical advice/attention if you feel unwell.

Skin contact : Wash thoroughly with soap and plenty of water while removing all

contaminated clothes.

If skin irritation or rash occurs: Get medical advice/attention.

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and

lower eyelids. Remove contact lenses, if present and easy to remove. Continue

to rinse for at least 15 minutes.

Get medical attention immediately.

Ingestion : Wash mouth with water and seek medical advice immediately.

Do not induce vomiting.

Information for doctor : No information is available.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

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## 5. Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2), Dry chemical, Alcohol-resistant foam, Water spray.

Unsuitable extinguishing media : Do not use water jet.

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

Carbon oxides, nitrogen oxides will form in fire.

#### 5.3 Advice for firefighters

Wear suitable protective suit and self-contained breathing apparatus.

## 6. Accidental release measures

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

Wear appropriate personal protective equipment as specified in section 8.

#### 6.2 Environmental precautions

Do not release into soil, sewers, river, or the public water courses.

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

In the case of a cartridge: Not applicable.

At the time of the leakage of contents: Absorb or cover with dry earth, sand or other non-combustible material and transfer to sealable containers. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

#### 6.4 Reference to other sections

Refer to Section 7, 8 and 13.

### 7. Handling and storage

## 7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Prohibition of dropping and throwing.

Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid contact with skin, eyes and clothing. Do not breathe vapours. Use only in a well-ventilated area.

When using do not eat or drink. Wash hands thoroughly after handling.

Keep away from fire, sparks and heated surfaces. Take precautionary measures against electrostatic discharges.

## 7.2 Conditions for safe storage, including any incompatibilities

Do not store ink in high or freezing temperature. Keep away from heat and direct sunlight.

Do not store ink with acids, oxidizing agents or explosives.

Keep containers tightly closed in a dry, cool and well-ventilated place.

## 7.3 Specific end uses

No further relevant information available.

#### 8. Exposure controls/personal protection

## 8.1 Control parameters

Components	CAS No.	EU-OEL (TWA)	EU-OEL (STEL)
Ethanol	64-17-5	1000 ppm, 1920 mg/m3	
1-Propanol	71-23-8	200 ppm, 500 mg/m3	250 ppm, 625 mg/m3
Acetone	67-64-1	500 ppm, 1210 mg/m3	
1-Butanol	71-36-3	50 ppm, 150 mg/m3	

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#### 8.2 Exposure controls

Engineering measures

Local Exhaust : Adequate ventilation should be provided so that exposure limits are not exceeded.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection : Impermeable gloves.

Eye protection : Safety glasses with side-shields. Goggles.

Skin and body protection : Protective suit, Safety shoes.

### 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance : Solvent type ink
Colour : Pale yellow
Odour : Alcohol odour
pH : 6.0 - 8.0

Melting point : No data available
Boiling point : No data available

Flash point : 13.0 degree C (Closed cup)

Evaporation rate : No data available
Upper/lower explosive limits : No data available
Vapour pressure : No data available
Vapour density : No data available
Relative density : No data available

Water solubility : Insolubility

Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available

Viscosity : Approx. 1.66 mPa·s (at 25 degree C)

Explosive properties : This product is considered a no explosive material under normal use condition.

Oxidising properties : There is nothing in general storage and handling.

#### 9.2 Other information

No further relevant information available.

## 10. Stability and reactivity

#### 10.1 Reactivity

No hazardous reactions with proper storage and handling.

## 10.2 Chemical stability

The product is stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions with proper storage and handling.

### 10.4 Conditions to avoid

High temperature, heat, sparks, flames and other sources of ignition. Oxidizing condition.

#### 10.5 Incompatible materials

Acid and strong oxidizer can cause a reaction.

#### 10.6 Hazardous decomposition products

Carbon oxides, nitrogen oxides will form in fire.

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## 11. Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

Acute toxicity (oral) : Ethanol LD50 (rat) 7,060 mg/kg

1-Propanol LD50 (rat) 3,830 mg/kg

1-Butanol LD50 (rat) 1,227 mg/kg (calculation value)

Acute toxicity (dermal) : Ethanol LDLo (rabbit) 20,000 mg/kg

1-Propanol LD50 (rabbit) >10,000 mg/kg

Acute toxicity (inhalation) : Ethanol LC50 (rat) 63,000 ppm/4h

1-Propanol LC50 (rat) >9.8 mg/l/4h

Skin corrosion/irritation : 1-Propanol (rabbit) 72h; Slight

1-Butanol (rabbit) 405 mg/24h; Moderate

Serious eye damage/eye irritation : 1-Propanol (rabbit) 72h; Severe

1-Butanol (rabbit) 1.62 mg; Severe

Respiratory or skin sensitization : 1-Propanol (guinea pig) Non-sensitizing

Germ cell mutagenicity : No data available
Carcinogenicity : No data available
Reproductive toxicity : No data available

Specific target organ systemic toxicity -

Single exposure

May cause drowsiness or dizziness.

Specific target organ systemic toxicity -

Repeated exposure

No data available

Aspiration hazard : No data available

## 12. Ecological information

12.1 Toxicity

Toxicity to fish : Ethanol LC50 (Pimephales promelas) >100 mg/l/96h

1-Propanol LC50 (Pimephales promelas) >804 mg/l/96h

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

Not applicable

12.6 Other adverse effects

No further relevant information available.

## 13. Disposal considerations

## 13.1 Waste treatment methods

Product : Dispose of waste material in accordance with local, state and federal pollution

regulations.

Contaminated packaging : When disposing of an empty container, dispose after removing contents

materials completely. Dispose of this material and its container according to

your country law.

according to Regulation (EC) No. 1907/2006

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## 14. Transport information

UN number : 1210
UN proper shipping name : Printing Ink
Transport hazard class : Class 3
Packing group : II

Sea transport

IMDG-Code:

Class : Class 3
UN number : 1210
Packing group : II

UN proper shipping name : Printing Ink

Marine pollutant : No

Air transport

ICAO-TI/IATA-DGR:

Class : Class 3
UN number : 1210
Packing group : II

UN proper shipping name : Printing Ink

Land transport

ADR / RID:

Class : Class 3
UN number : 1210
Packing group : II

UN proper shipping name : Printing Ink

## 15. Regulatory information

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

EU regulations

(EC) No 1907/2006 (REACH)

Annex XIV (Authorisation) : Not regulated
Annex XVII (Restrictions on use) : Not applicable

## 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

## 16. Other information

## Full text of H-Statements referred to under sections 2 and 3.

H225 : Highly flammable liquid and vapour.

H226 : Flammable liquid and vapour.

H302 : Harmful if swallowed.H315 : Causes skin irritation.

H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.
H336 : May cause drowsiness or dizziness.

according to Regulation (EC) No. 1907/2006

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The information contained herein is based on the current knowledge.

This Safety Data Sheet is intended to describe our products in correctness of safety requirements.

It should not therefore be construed as guaranteeing specific properties.

The data applies to only usual handing.