SAFETY DATA SHEET



Authoring Date 11-Nov-2014 Revision date 19-Dec-2014

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code 20P2J2100E

Product name INK MAGENTA COLUMBA (REV3.0)

Pure substance/mixture mixture

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

Recommended Use Ink

1.3. Details of the supplier of the safety data sheet

Manufacturer Supplier / Importer

DIC Corporation Saitama Plant 4472-1, DIC Europe GmbH65D, D-40210 Düsseldorf, Germany: +49-211-1643-170 FAX:

Oaza Komuro, Ina-machi, Kita-Adachi-gun,+49-211-1643-889 Emergency TEL: +49-211-1643-170 *Business hour

Saitama 362-8577, Japan onlymail:msds@dic-europe.de *Business hour only

Tel:+81-48-722-8211 Fax:+81-48-722-6087

For further information, please contact

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

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

Full text of R-phrases: see section 16

Hazard symbols

Not dangerous

2.2. Label elements

Signal word

Not classified

Hazard statements

Contains 1,2-Benzisothiazoline-3-one EUH208 - May produce an allergic reaction

------ EGHS / EN ------

EUH210 - Safety data sheet available on request

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Precautionary Statements - EU (§28, 1272/2008)

P281 - Use personal protective equipment as required

P314 - Get medical advice/attention if you feel unwell

P404 - Store in a closed container

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

Other hazards

· Not Applicable

Hazards not otherwise classified (HNOC)

· Not Applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not Applicable

3.2 Mixtures

Pure substance/mixture mixture

Chemical Name	EC No	CAS No	weight-%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
WATER	231-791-2	7732-18-5	70-80	-	No data available	
Solvents	CBI	CBI	15-25	-	No data available	
Triethylene glycol	203-953-2	112-27-6	1-5	-	No data available	
Colorants	CBI	CBI	1-10	-	No data available	
Polymers	CBI	CBI	1-5	-	No data available	
Additives	CBI	CBI	<1	-	No data available	
Others	CBI	CBI	<1	-	No data available	

Full text of R-phrases: see section 16

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

INHALATION Remove to fresh air. If symptoms persist, call a physician.

Skin Contact Wash skin with soap and water. If symptoms persist, call a physician.

------ EGHS / EN ------

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists: Get medical advice/attention.

INGESTION Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a

physician.

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

Symptoms No data available.

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

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

CO2, dry chemical, dry sand, alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Caution: Use of water spray when fighting fire may be inefficient

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up with sand or other non-combustible absorbent material and place into containers

for later disposal. Use personal protective equipment as required.

------ EGHS / EN ------

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

No special requirements for writing instruments.

7.3. Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	ACGIH	European Union	United Kingdom	France	Germany
Triethylene glycol					TWA: 1000 mg/m ³
112-27-6					Ceiling / Peak: 2000
					mg/m³
Chemical Name	Denmark	Austria	Switzerland	Poland	Norway
Triethylene glycol			STEL: 2000 mg/m ³		
112-27-6			TWA: 1000 mg/m ³		

8.2. Exposure controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand Protection Gloves made of plastic or rubber.



Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state liquid

------ EGHS / EN ------

Appearance aqueous solution Odor Odorless

Color red Odor Threshold No data available

Property Values Remarks • Method

pH 10

Melting point/freezing pointNo data availableBoiling point/boiling rangeca. 100 °C / ca. 212 °F

Flash point

Evaporation rate

Flammability (solid, gas)

Not flammable

No data available

No data available

Flammability Limits in Air

Upper flammability limits
Lower flammability limit

Vapor Pressure

Vapor density

No data available
No data available
No data available

Specific gravity 1.0-1.1

Water solubility

Solubility(ies)

Partition coefficient

Autoignition temperature

Decomposition temperature

Kinematic viscosity

No data available
Simpa·s(25 deg.C)

9.2. Other information

Molecular weightNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data availableSoftening pointNo data availableVOC Content (%)No data availableDensityNo data availableBulk densityNo data available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not Applicable

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge none.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

None known based on information supplied.

------ EGHS / EN ------

10.5. Incompatible materials

None known based on information supplied.

10.6. Hazardous decomposition products

None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Unknown Acute Toxicity 26% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) > 5000 mg/kg
ATEmix (dermal) > 5000 mg/kg
ATEmix (inhalation-gas) > 20000 ppm
ATEmix (inhalation-dust/mist) > 5 mg/l
ATEmix (inhalation-vapor) > 20 mg/l

Component Information Caution - This preparation contains a substance not yet fully tested

LD/LC50 values that relevant for classification.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
WATER	> 90 mL/kg (Rat)		
Triethylene glycol	= 15000 mg/kg (Rat)	> 20 mL/kg (Rabbit)	

Skin corrosion/irritation No data available. No data available. Serious eye damage/eye irritation Sensitization No data available. No data available. Germ cell mutagenicity No data available Carcinogenicity Reproductive toxicity No data available. STOT - single exposure No data available. STOT - repeated exposure No data available. **Aspiration hazard** No data available.

Symptoms No data available.

Information on likely routes of exposure

INHALATIONNo data available.Eye contactNo data available.Skin ContactNo data available.INGESTIONNo data available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity The table below indicates component(s) of known hazards to the aquatic environment.

26% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name Algae/aquatic plants Fish Crustacea

------ EGHS / EN ------

Triethylene glycol

56200 - 63700: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Lepomis macrochirus mg/L LC50 static 61000: 96 h Lepomis macrochirus mg/L LC50 flow-through 1000: 96 h Lepomis macrochirus mg/L LC50 flow-through

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

Waste from Residues / Unused

Products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging

Dispose of in accordance with federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

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14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not Applicable
Environmental hazard	Not Applicable

14.6 Special Provisions none

RID

14.1UN/ID noNot regulated14.2Proper shipping nameNot regulated14.3Hazard ClassNot regulated14.4Packing GroupNot regulated14.5Environmental hazardNot Applicable

14.6 Special Provisions none

<u>ADR</u>

14.1 UN/ID no Not regulated

------ EGHS / EN ------

14.2 Proper shipping name Not regulated 14.3 Hazard Class Not regulated 14.4 Packing Group Not regulated 14.5 Environmental hazard Not Applicable 14.6 Special Provisions none IATA 14.1 UN/ID no Not regulated Not regulated 14.2 Proper shipping name Not regulated 14.3 Hazard Class Not regulated 14.4 Packing Group 14.5 Environmental hazard Not Applicable 14.6 Special Provisions none ADN 14.1 UN/ID no Not regulated Not regulated 14.2 Proper shipping name 14.3 Hazard Class Not regulated Not regulated 14.4 Packing Group 14.5 Environmental hazard Not Applicable

Section 15: REGULATORY INFORMATION

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

National Regulations

14.6 Special Provisions

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number	Title
Triethylene glycol 112-27-6	RG 84	

Germany

Water hazard class (WGK) Water endangering class = 1 (self estimation)

none

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

EINECS/ELINCS

Legend

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

No Chemical Safety Assessment has been carried out for this substance/mixture

Section 16: OTHER INFORMATION

------ EGHS / EN ------

Full text of R-phrases referred to under sections 2 and 3

Not Applicable

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

EUH208 - May produce an allergic reaction

EUH210 - Safety data sheet available on request

Key or legend to abbreviations and acronyms used in the safety data sheet

No data available

Key literature references and sources for data

No information available

Authoring Date 11-Nov-2014

Revision Note 2.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Reference

LOLI Database (ChemADVISOR,Inc.)

The reference on GHS classification results

EU CLP(1272/2008)Annex VI Table 3.1

Other information

No data available