

SAFETY DATA SHEET



A CANON COMPANY

IJC224 / IJC244 Ink Tank Cyan CS2024 / CS2044

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : IJC224 / IJC244 Ink Tank Cyan CS2024 / CS2044
Article number : 29952203 / 29952209
Product code (Canon) : 8593A003AB / 8587A003AA

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

Identified uses : Inkjet printing ink for for Océ CS2024/CS2044. Other uses are not recommended.

1.3 Details of the supplier of the safety data sheet

Supplier : Océ-Technologies B.V.
Address : St. Urbanusweg 43, 5914 CA Venlo, the Netherlands
Telephone number : +31 77 359 2222
e-mail address : sds-hq@oce.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : United Kingdom: 111

Emergency telephone number

Telephone number : + 44 (0) 1235 239 670
Hours of operation : 24h
Information limitations : For chemical emergencies only.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 16 for the full text of the H statements declared above.

2.2 Label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Safety data sheet available on request.

2.3 Other hazards

Other hazards which do not result in classification : To the best of our knowledge, with due observance of the recommended exposure limits and of normal hygiene this product presents no health hazard in normal use.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Glycerin	EC: 200-289-5 CAS: 56-81-5	5 - 10	Not classified.	Not classified.	[2]
Ethyene glycol	EC: 203-473-3 CAS: 107-21-1	5 - 10	Xn; R22,	Acute Tox. 4, H302	[1] [2]
Diethylene glycol	EC: 203-872-2 CAS: 111-46-6	1 - 5	Xn; R22	Acute Tox. 4, H302	[1] [2]
Isopropyl alcohol	EC: 200-661-7 CAS: 67-63-0	1 - 5	F; R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 (Narcotic effects)	[1] [2]
Poly(oxy-1, 2-ethanediyl), alpha, alpha'-(1,4-dimethyl-1, 4-bis(2-methylpropyl) -2-butyne-1,4-diyl)bis (omega-hydroxy-	EC: 500-022-5	1 - 5	Xi; R41	Eye Dam. 1, H318	[1]
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, aminosulfonyl sulfo derivs., sodium salts	CAS: 9014-85-1 EC: 291-001-7 CAS: 90295-11-7	1 - 5	Xi; R36	Eye Irrit. 2 (H319) See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation occurs.
- Inhalation** : Move exposed person to fresh air. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

- Eye contact** : May cause slight eye irritation.
- Inhalation** : No adverse effects are expected under intended use. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.
- Skin contact** : Neither irritation nor sensitization is expected.
- Ingestion** : Ingestion may cause abdominal pain, diarrhea, dizziness, drowsiness, dullness, headache, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : No specific hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Not available.
- Special protective equipment for fire-fighters** : No special protection is required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Avoid contact with eyes, skin and clothing.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up

- Small spill** : Wipe off with wet cloth or paper. Dispose of according to all federal, state and local applicable regulations.
- Large spill** : Stop leak if without risk. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

SECTION 6: Accidental release measures

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Use only with adequate ventilation. Avoid contact with eyes, skin and clothing.
Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry and cool area. Store in original container, protected from direct sunlight. Keep away from heat, sparks and flame. Keep out of the reach of children.

7.3 Specific end use(s)

For professional users only.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Ethylene glycol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. TWA: 10 mg/m³ 8 hours. Form: Particulate STEL: 104 mg/m³ 15 minutes. Form: Vapour TWA: 52 mg/m³ 8 hours. Form: Vapour STEL: 40 ppm 15 minutes. Form: Vapour TWA: 20 ppm 8 hours. Form: Vapour
Glycerin	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m³ 8 hours. Form: Mist
Diethylene glycol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 101 mg/m³ 8 hours. TWA: 23 ppm 8 hours.
Isopropyl alcohol	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1250 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m³ 8 hours. TWA: 400 ppm 8 hours.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands after handling compounds and before eating, smoking and using the lavatory and at the end of the day.

SECTION 8: Exposure controls/personal protection

Eye/face protection	: Not required during normal intended use of this product.
Skin protection	
Hand protection	: Not required during normal intended use of this product.
Body protection	: Not required during normal intended use of this product.
Other skin protection	: Not required during normal intended use of this product.
Respiratory protection	: Not required during normal intended use of this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Cyan
Odour	: Slight [Slight]
Odour threshold	: Not available.
pH	: 9 to 10
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: 57,2°C [Product does not sustain combustion.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Non-flammable.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 1.0 - 1.1
Solubility(ies)	: Soluble in the following materials: water
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 1 to 5 mPa·s
Explosive properties	: None (Estimate)
Oxidising properties	: None (Estimate)

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: Acids, bases, oxidizing materials and reducing agents.

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products : Carbon dioxide (CO₂).
Carbon monoxide.
Ammonia.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethylene glycol	LD50 Oral	Rat	4700 mg/kg	-
Glycerin	LC50 Inhalation Dusts and mists	Rat	>20 mg/l	4 hours
-	LD50 Dermal	Rabbit	>10000 mg/kg	-
-	LD50 Oral	Rat	12600 mg/kg	-
Isopropyl alcohol	LC50 Inhalation Gas.	Rat	16000 ppm	8 hours
-	LC50 Inhalation Vapour	Rat	72,6 mg/l	4 hours
-	LD50 Dermal	Rabbit	12800 mg/kg	-
-	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Conclusion/Summary

Skin : Non irritating on rabbit (OECD 404, method B4).

Eyes : Minimal irritant (rabbit). OECD No.405, Method B5

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Glycerin	skin	Human	Not sensitizing

Conclusion/Summary

Skin : Non sensitiser on guinea pig (OECD 406, method B6).

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Glycerin	-	Experiment: In vitro Subject: Bacteria	Negative
Isopropyl alcohol	476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
-	471 Bacterial Reverse Mutation Test	Subject: Bacteria	Negative

Conclusion/Summary : Ames test: Negative (S. typhimurium & E. coli)

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Glycerin	Negative - Oral - TC	Rat	-	-
Isopropyl alcohol	Negative - Inhalation - TCLo	Rat	>5000 ppm	-

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
Glycerin	Negative	Negative	Negative	Rat	Oral: 2000 mg/kg	7 days per week

Conclusion/Summary : No known significant effects or critical hazards.

SECTION 11: Toxicological information

Information on the likely routes of exposure : Not available.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Ethylene glycol	Acute LC50 41000000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
-	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Glycerin	Acute EC50 250 mg/l	Algae	72 hours
-	Acute EC50 250 mg/l	Daphnia	48 hours
-	Acute LC50 54000 mg/l	Fish	96 hours
Diethylene glycol	Acute LC50 32000 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
Isopropyl alcohol	Acute EC50 >10000 mg/l	Daphnia	24 hours
-	Acute LC50 9640 mg/l	Fish	96 hours
-	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
-	Chronic NOEC 30 mg/l	Daphnia	21 days

12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Glycerin	-	-	Readily
Isopropyl alcohol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Ethylene glycol	-1,36	-	low
Glycerin	-1,76	3	low
Diethylene glycol	-1,98	100	low
Isopropyl alcohol	0,05	1	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : Dispose of according to all federal, state and local applicable regulations.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

European waste catalogue (EWC)

Waste code	Waste designation
08 03 13	waste ink other than those mentioned in 08 03 12

SECTION 13: Disposal considerations

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Ink tanks.	15 01 02 plastic packaging.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1-14.5 : This product is not regulated for carriage according to ADR/RID, ADN, IMDG, ICAO/IATA.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

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.

Other EU regulations

Europe inventory : All components are listed or exempted.

Regulation (EC) No. 648/2004, on Detergents , Annex VII : Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

SECTION 15: Regulatory information

Not listed.

15.2 Chemical Safety Assessment : Not required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification		Justification
Not classified.		
Full text of abbreviated H statements	H225 H302 H318 H319 H336	Highly flammable liquid and vapour. Harmful if swallowed. Causes serious eye damage. Causes serious eye irritation. May cause drowsiness or dizziness.
Full text of classifications [CLP/GHS]	Acute Tox. 4, H302 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 STOT SE 3, H336	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Date of printing : 21-05-2015

Date of issue/ Date of revision : 21-05-2015

Date of previous issue : 21-05-2015

Version : 2

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.