

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

1.1 PRODUCT IDENTIFIER

Product name: Cyan Wide Format Inkjet Cartridge for Roland ESL3-4CN
Part number: ROLES4CWF

1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: Inkjet Printers

1.3 SUPPLIER DETAILS

Supplier: Clover Imaging Group
4200 Columbus Street
Ottawa, IL 61350
United States
Phone number: 815-431-8100
Fax: 815-461-8583
Contact Hours: 08:00AM-05:00PM CST

1.4 EMERGENCY TELEPHONE NUMBERS

Supplier: 815-431-8100

* This document provides safety-related information about ink/toner, in various forms, for use in copiers/printers etc.

2. HAZARDS IDENTIFICATION

2.1 INFORMATION and CLASSIFICATION

Overview: Classification according to GHS: Acute Tox.4: H312 Harmful in contact with skin. Acute Tox.4: H332 Harmful if inhaled. Skin Irrit.2: H315 Causes skin irritation. Eye Irritant: H319. Combustible Liquid: H227. Hazard Statements: H312:Harmful in contact with skin. H315: Causes skin irritation. H322: Harmful if inhaled. H319: Causes serious eye irritation. Precautionary Statements: PREVENTION: P264: Wash hands thoroughly after handling. P280: Wear protective gloves/eye protection/face protection. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P273: Avoid release to the environment. RESPONSE: P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. P332+P313+P333: If SKIN IRRITATION OCCURS: Get medical advice/attention. P305+P351+P338+P337: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352: IF ON SKIN: Wash with plenty of soap and water. P403 +P233 Store in a well-ventilated place. Keep container tightly closed. P363: Wash contaminated clothing before reuse. DISPOSAL: P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.2 LABEL ELEMENTS

Applicable Pictograms:



Danger Indications: 2-Ethoxy Ethyl Ether: GHS (Rev 5): Skin Irrit.2 H315. Propylene Carbonate: GHS (Rev 5): Eye Irritant.2A; H319. Hexan-6-olide: GHS (Rev 5): Eye Irritant. 2A; H319.

Risk Phrases: N/A

Safety Phrases: Signal word: Danger

2.3 OTHER HAZARDS

PBT or vPvB: This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB). This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS number	Weight %	OSHA PEL	ACGIH TLV	Other
Colorant	Trade Secret	1-5			
2-Ethoxy Ethyl Ether	112-36-7	30-60			EC No: 203-936-7 GHS (Rev 5): Skin Irrit.2; H315
Propylene Carbonate	108-32-7	5-15			EC No: 203-572-1 GHS (Rev 5): Eye Irritant. 2A; H319
Polymer	Trade Secret	1-10			
Hexan-6-olide	96-48-0	5-15			EINECS # 207-938-1 GHS (Rev 5): Eye Irritant. 2A; H319

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest Directives.

This section provides composition information for the specified substance/mixture.

4. FIRST-AID MEASURES

4.1 FIRST AID MEASURES

4.1.1 FIRST AID INSTRUCTIONS BY RELEVANT ROUTES OF EXPOSURE

Inhalation:	If inhaled move to fresh air. Respiratory irritation may occur, if persists seek medical attention. If not breathing, give artificial respiration preferably mouth to mouth.
Eye contact:	Do not rub eyes. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.
Skin contact:	In case of contact, immediately flush skin with soap and plenty of water while removing contaminated clothes and shoes. Wash clothing before reuse. Get medical attention if symptoms appear.
Ingestion:	Rinse mouth with water. Give two glasses of water and monitor closely. Call a poison control center, emergency room, or physician before trying to induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

4.1.2 ADDITIONAL FIRST AID INFORMATION

Additional first aid information:	N/A
Immediate Medical Attention Required:	Treat symptomatically.

4.2 SYMPTOMS AND EFFECTS

Acute Symptoms from Exposure:	No known significant effects or critical hazards.
Delayed Symptoms from Exposure:	N/A

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Recommended Extinguishing Media: Alcohol-resistant foam, dry chemical, carbon dioxide(CO2), water spray.
Extinguishing Media Not to be Used: N/A

5.2 SPECIAL HAZARD

Unusual Fire/Explosion Hazards: Special Hazards arising from the substance or mixture: Carbon oxides.
Extinguishing Media Not to be Used: N/A

5.3 ADVICE FOR FIRE FIGHTERS

Avoid inhalation of smoke. Wear protective clothing and wear self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1 PRECAUTIONS FOR NON-EMERGENCY PERSONNEL

Use personal protective equipment. Gloves and eye/face protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.1.2 ADDITIONAL FIRST AID INFORMATION

N/A

6.1.3 PERSONAL PROTECTION

Wear personal protective equipment as described in Section 8.

6.2 ENVIRONMENTAL PRECAUTIONS

Regulatory Information: Keep product out of sewers and watercourses.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP

Spill or Leak Cleanup Procedures: 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. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling: No special precautions when used as intended. Keep containers closed. If toner, avoid creating dust. Keep away from ignition sources.

Advice on General Hygiene: Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

7.2 CONDITIONS FOR SAFE STORAGE

Avoid high temperatures, >100°F/32°C

7.3 SPECIFIC END USES

Printing devices

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release in order to maintain airborne concentrations of the product below OSHA PELs (See Section 3). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.2 EXPOSURE CONTROLS

Respiratory protection:

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134 and 1910.137) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given work conditions, levels of airborne contamination, and sufficient levels of oxygen.

Eye/Face Protection:

Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Hand/Skin Protection:

For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. WARNING! Air purifying respirators do not protect worker in oxygen deficient atmospheres.

Additional Protection:

N/A

Protective Clothing and Equipment:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splash-proof chemical goggles and face shield when working with liquid, unless full face piece respiratory protection is worn.

Safety Stations:

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.

Comments:

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 **DETAIL INFORMATION**

Physical state: APPEARANCE: Cyan liquid.
Color: Cyan
Odor: Slight
Odor threshold: N/A

Boiling point: Approx 176°C or higher
Melting point: No data available.
Flash point: Approx 81°C
Explosion limits: No data available.
Relative density: No data available.
Auto-ignition temperature: Not below 220°C

9.2 **OTHER INFORMATION**

SPECIFIC GRAVITY .975+/-0.05 (25°C). Easily soluble (Diethylene glycol diethyl ether).

10. CHEMICAL STABILITY AND REACTIVITY

10.1 **Reactivity:**

Reactivity Hazards: None

Data on Mixture Substances: None

10.2 **Chemical Stability:** The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

10.3 **Hazardous Polymerization:** Stable under conditions of normal use.

10.4 **Conditions to Avoid:** Keep away from heat, flame, sparks and other ignition sources.

10.5 **Incompatible Materials:** Strong oxidizing materials

10.6 **Hazardous Decomposition:** Will not occur.

11. INFORMATION ON TOXICOLOGICAL EFFECT

Mixtures:	Water based inkjet ink (Mixture)
Acute Toxicity:	[Diethylene Glycol Diethyl Ether] LD50 Oral, rat: 4,970 mg/kg. LD50 Skin, rabbit: 6,700 uL/kg. Draize test, eye rabbit: 50 mg moderate.
Skin Corrosion/Irritation:	Overexposure of ink contact with the skin may cause irritation and, in some people, swelling and redness.
Serious Eye Damage:	Overexposure to the eye surface may be mildly irritating.
Inhalation:	Intentional inhalation to ink vapors may result in respiratory tract irritation.
Sensitization:	No information available.
Mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive Toxicity:	No information available.
STOT - Single Exposure:	N/A
STOT - Multiple Exposure:	N/A
Ingestion:	Intentional or accidental oral ingestion may cause an upset stomach.
Hazard Class Information:	N/A
Mixture on Market Data:	N/A
Symptoms:	N/A
Delayed/Immediate Effects:	N/A
Test Data on Mixture:	N/A
Not Meeting Classification:	N/A
Routes of Exposure:	Skin absorption, breathing, ingestion, eye contact.
Interactive Effects:	N/A
Absence of Specific Data:	N/A
Mixture vs Substance Data:	N/A

12. ECOLOGICAL INFORMATION

12.1 Eco toxicity:	Acquatic toxicity: No further information available
12.2 Degradability:	No further relevant information available.
12.3 Bioaccumulation Potential:	No further relevant information available.
12.4 Mobility in Soil:	No further relevant information available.
12.5 PBT & vPvB Assessment:	PBT: Not applicable. vPvB: Not applicable.
12.6 Other Adverse Effects:	No further relevant information available.

13. DISPOSAL CONSIDERATIONS**Disposal Information:**

Dispose of product in accordance with local authority regulations.
Empty container retains product residue.

Physical/Chemical Properties that affect Treatment:

Symbol: This product is not classified as dangerous
Risk Phrases: This product is not classified according to the federal, state and local environmental regulations.

Waste Treatment Information:

If toner, do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulations.

Personal Protection Required:

N/A

14. TRANSPORT INFORMATION

- 14.1 **ID Number:** UN Number: NA1993
- 14.2 **Shipping Name:** Combustible liquid, n.o.s.
- 14.3 **Hazard Class:** Combustible Liquid
- 14.4 **Packing Group:** III
- 14.5 **Environmental Hazards:** Regulated as a class III combustible liquid by DOT, IATA, IMO.
- 14.6 **User Precautions:** Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.
- 14.7 **Bulk Transport:** N/A

15. REGULATORY INFORMATION

- 15.1 **Regulatory Information:** :EU Regulation (EC) No. 1272/2008 (CLP Regulations) : 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

EPA Regulatory Information: N/A

CERCLA Reportable Quantity: N/A

- 15.2 **Superfund Information:**

Hazard Categories:

Immediate: N/A

Delayed: N/A

Fire: NFPA Rating: Health = 2 Fire = 2 Reactivity = 0

Pressure: N/A

Reactivity: N/A

Section 302 - Extremely Hazardous: N/A

Section 311 - Hazardous: N/A

- 15.3 **State Regulations:** CALIFORNIA PROPOSITION 65 INFORMATION: Not regulated

- 15.4 **Other Regulatory Information:** :US Regulation : TSCA Section 4(a) Final Test Rules Regulated: Not regulated : TSCA Section 5 Significant New Use Rule - Regulation Proposed: Diethylene glycol diethyl ether (CAS No. 112-36-7) : 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: Diethylene glycol diethyl ether (CAS No. 112-36-7) : Clean Air Act Section 112, Hazardous Air Pollutants (HAPs): Diethylene glycol diethyl ether (CAS No. 112-36-7)

16. OTHER INFORMATION

General Comments: This information is based on our current knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application

Creation Date of this SDS: 03/11/2021

Key to Abbreviations and Acronyms used in this sheet:

ACGIH = American Conference of Governmental Industrial Hygienists	NIOSH = National Institute for Occupational Safety and Health
CERCLA = Comprehensive Environmental Response Compensation and Liability Act	OSHA = Occupational Health and Safety Administration
CLP = Classification, Labeling, and Packaging	PEL = Permissible Exposure Limit
DSD = Dangerous Substances Directive	SCBA = Self Contained Breathing Apparatus
EPA = Environmental Protection Agency	STOT = Specific Target Organ Toxicity
GHS = Globally Harmonized System	TLV = Threshold Limit Value
N/A = Not Applicable	UK = United Kingdom
NFPA = National Fire Protection Association	UN = United Nations

Ref:

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