

Safety Data Sheet

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

1.1. Product identifier:

CLEANING LIQUID FOR EcoXtreme Ink, AI-CL
 MAINTENANCE LIQUID FOR EcoXtreme Ink, AI-ML
 CLEANING LIQUID,(AI-CL) 200ML/ CLEANING LIQUID,(AI-CL) 500ML

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

1.3. Details of the supplier of the safety data sheet

Manufacture's name: Roland DG Corporation
 Address: 1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi,
 Shizuoka-ken, 431-2103
 JAPAN
 Phone: + 81-53-484-1224
 Fax: + 81-53-484-1226

E-mail Address:

Revised: 28 December, 2015

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is not classified as hazardous according to GHS criteria.

2.2. GHS label elements, including precautionary statements

The product does not need to be labelled in accordance with GHS criteria.

2.3. Other hazards

Potential Health Effects

Eye: Contact with eye may be irritating.
 Skin: Contact with skin may cause irritation, swelling or redness.
 Inhalation: Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
 Ingestion: May cause upset stomach.
 Chronic Health Hazards: No information available.
 Carcinogenicity: None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)

3. Composition/information on ingredients

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008
2-(2-butoxyethoxy)ethyl acetate	124-17-4	204-685-9	N/A for the moment	>98%	Not classified as hazardous

4. First aid measures

4.1. Description of first aid measures

Eyes:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during flushing. Call a physician.
Skin:	In case of contact, immediately flush with plenty of water while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. If swelling or redness occurs, call a physician.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion:	If swallowed, DO NOT induce vomiting. Seek immediate medical advice.

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

Eyes:	Contact with eye may be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach

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

No information

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, dry chemical, carbon dioxide or foam

Unsuitable extinguishing media:

No information

5.2. Special hazards arising from the substance or mixture

Hazardous Decomposition Products: Burning in insufficient air supply may produce toxic fume of carbon monoxide.

Flash point: 105deg.C (closed cup)

5.3. Advice for firefighters

Wear self-contained breathing apparatus (SCBA) and full protective equipment.

Applying direct water may be dangerous because fire may expand to surroundings.

6. Accidental release measures

General:

Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill. Absorb spill with sand or earth then place in a chemical waste container.

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus and wear appropriate personal protective equipment.

6.2. Environmental precautions

Wipe off spillage. Prevent liquid from entering sewers, waterways or low areas.

6.3. Methods and material for containment and cleaning up

Sweep up material and dispose as waste following local regulations. Scrub contaminated area with detergent and water.

6.4. Reference to other sections

Refer to "Section 8 Exposure controls/ personal protection" and "Section 13 Disposal consideration" as appropriate.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes, skin and clothing. Use proper ventilation and no fire in work place. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink. Do not dismantle container.

7.2. Conditions for safe storage, including any incompatibilities

Do not store the product in high or freezing temperatures. Keep the product out of direct sunlight. Do not store the product with oxidizing agents or explosives.

7.3. Specific end use(s): Inkjet printing

8. Exposure controls/ personal protection

8.1. Control parameters

Occupational Exposure Limits: Not specified.

8.2. Exposure controls:

Occupational exposure control:	Control the airborne concentrations below the exposure limits. Use only with adequate ventilation.
Personal protective equipment:	
Respiratory protection:	Not required under suitable use as setting the cartridge on the printer. However, in case ventilation is not sufficient, wear respiratory protection.
Hand protection:	Not required under suitable use as setting the cartridge on the printer. However, in case of direct contact to ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Eye protection:	Not required under suitable use as setting the cartridge on the printer. However, in case of bottle container, wear safety glasses or chemical splash goggles.
Skin protection:	Not required under suitable use as setting the cartridge on the printer. However, in case of bottle container, wear protective clothing.
Hygiene measures:	Wash hands after handling. In case contact with clothing, wash before reuse. Do not eat, drink or smoke in handling or storage area.
Environmental exposure control:	Avoid release to the environment.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid	
Odor:	Slightly solvent odor	
pH:	No data available	
Boiling point:	245-247deg.C	
Melting point:	-32deg.C	
Flash point:	105deg.C (closed cup)	
Autoflammability:	No data available	
Explosive properties:	explosive limit	-lower limits 0.6vol% -upper limits 10.7vol%

Oxidizing properties:	No data available
Vapor Pressure:	5.3Pa @ 20deg.C
Vapor density:	7.0(Air=1)
Specific gravity:	0.98g/cm ³ @ 20deg.C
Solubility in Water:	6.5g/100ml @ 20deg.C
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	2.9
Viscosity:	No data available

9.2. Other information: No information

10. Stability and reactivity

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| 10.1. Reactivity: | No data available |
| 10.2. Chemical stability: | Stable under normal temperature |
| 10.3. Possibility of hazardous reactions: | Not expected |
| 10.4. Conditions to avoid: | High and freezing temperatures |
| 10.5. Incompatible materials: | Acids and oxidizing agents |
| 10.6. Hazardous decomposition products: | Burning in insufficient air supply may produce toxic fume of carbon monoxide. |

11. Toxicological information

11.1. Information on toxicological effects

Routes Of Overexposure:	Eye, skin, inhalation, and oral	
Acute toxicity:	Oral LD50	>6500mg/kg (Rat)
	Dermal LD50	>14500mg/kg (Rabbit)
	Inhalant LC50	>72500mg/m ³ (4hr@Rat)
Skin corrosion/irritation:	Mild irritant (Rabbit OECD404)	
Serious eye damage/eye irritation:	Mild irritant (Rabbit OECD405)	
Respiratory or skin sensitisation:	No data available	
Germ cell mutagenicity:	Negative (by Ames Test)	
Reproductive toxicity:	No data available	
Carcinogenicity:	None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)	
STOT-single exposure:	Overexposure of eye may be mildly irritating.	
	Overexposure of skin may cause irritation and in some people swelling and redness.	
	Inhalation may result in respiratory irritation and anesthesia.	
	Ingestion may cause an upset stomach.	
STOT-repeated exposure:	No data available	
Aspiration hazard:	No data available	

12. Ecological information

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| 12.1. Toxicity: | No data available |
| 12.2. Persistence and degradability: | No data available |
| 12.3. Bioaccumulative potential: | Expected to biodegrade. |
| 12.4. Mobility in soil: | No data available |
| 12.5. Results of PBT and vPvB assessment: | Has not carried out PBT and vPvB assessment. |
| 12.6. Other adverse effects: | No data available |

Disclosure of this product and abandonment have a possibility of affecting environment. Then, cautions are required for handling. It is necessary to cope with it so that especially a product or washing water may not flow to the ground, a river, and a drain.

13. Disposal considerations

13.1. Waste treatment methods:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Do not flush to surface water or sanitary sewer system.

14. Transport information

14.1. UN Class/UN Number:

ADR/ADG/DOT, IMDG, or IATA : Not regulated

14.2. UN proper shipping name:

ADR/ADG/DOT, IMDG, or IATA : Not regulated

14.3. Transport hazard class(es):

ADR/ADG/DOT, IMDG, or IATA : Not regulated

14.4. Packing group:

ADR/ADG/DOT, IMDG, or IATA : Not regulated

14.5. Environmental hazards:

ADR/ADG/DOT, IMDG, or IATA : Not regulated

14.6. Special precautions for user:

Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code:

Not regulated

15. Regulatory information

US Regulation:

Toxic Substances Control Act (TSCA): All ingredients are listed on the TSCA Inventory.

SARA TITLE III:

Section 313: 2-(2-butoxyethoxy)ethyl acetate (Chemical Category N230)

California Proposition 65: Not regulated

EU Information:

Chemical Safety Assessment according to (EC)1907/2006:

This product has not carried out any Chemical Safety Assessment yet.

Australia Information:

Hazardous statement: Not classified as hazardous according to NOHSC criteria.

International Information:

None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)

16. Other Information

List of relevant H-Statements: Nothing

The information in this Safety Data Sheet (SDS) is believed to be correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is subject to revision as additional knowledge and experience is gained. Roland DG does not warrant the completeness or accuracy of the information contained herein.