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## Safety Data Sheet

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

#### 1.1. Product identifier

CLEANING LIQUID, (ESL5) 100ML  
CLEANING LIQUID, (ESL5) 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 date: 29 September, 2017

#### 1.4. Emergency telephone:

### 2. Hazard identification

#### 2.1. Classification of the substance or mixture

This product is not classified as hazardous according to Directive 1999/45/EC.

This product is classified as dangerous according to GHS.

Flammable liquids Category 4

#### 2.2. GHS label elements, including precautionary statements

Pictogram None

Signal word(s) Warning

Hazard statement(s) Combustible liquid.

Precautionary statement(s)

Prevention Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
Wear protective gloves/protective clothing/eye protection/face protection.

Storage Store in a well-ventilated place.

### 2.3. Other hazards

#### Potential Health Effects:

- Eyes: Contact with eye may be mildly irritating.
- Skin: **Contact with skin may cause irritation, swelling or redness, allergic sensitization.**
- Inhalation: Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
- Ingestion: May cause upset stomach.
- Chronic Health Hazards: **Repeated skin contact may cause a persistent irritation or dermatitis.**
- Carcinogenicity: None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)

### 3. Composition/information on ingredients

**Chemical nature:** mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	50-60	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	50-60	Not classified as hazardous

\*C.B.I.: Confidential Business Information

### 4. First aid measures

#### 4.1. Description of first aid measures

- Eyes: **In case of contact, immediately flush eyes with plenty of water for several 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 mildly irritating.
- Skin: **Contact with skin may cause irritation, swelling or redness, allergic sensitization.**
- Inhalation: Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
- Ingestion: **May cause injury of mouth, throat, and stomach.**

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

No information

## 5. Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray

Unsuitable extinguishing media:

Water, High-pressure water jet

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

Flash Point: 71-72 deg.C

### 5.3. Advice for firefighters

**Wear special chemical protective clothing and positive pressure self-contained breathing apparatus(SCBA). Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Applying direct water may be dangerous because fire may expand to surroundings.**

## 6. Accidental release measures

### 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.**

### 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.**

### 7.2. Conditions for safe storage, including any incompatibilities

**Keep containers tightly closed. Do not store the product in high or freezing temperatures. Keep the product out of direct sunlight. Do not store the product with metals, amines, free radical initiators, oxidising agents.**

### 7.3. Specific end use(s):

**Cleaning liquid**

## 8. Exposure controls/ personal protection

### 8.1. Control parameters

Occupational Exposure Limits: Not specified.

## 8.2. Exposure controls:

Appropriate engineering controls:	Provide general and/or local exhaust ventilation.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. <b>WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.</b>
Hand protection:	Not required under suitable use as setting the cleaning liquid on the printer. However, in case of direct contact to the cleaning liquid, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Eye protection:	Not required under suitable use as setting the cleaning liquid on the printer. However, in case of direct contact to the cleaning liquid, wear safety glasses or chemical splash goggles.
Skin protection:	Not required under suitable use as setting the cleaning liquid on the printer. However, in case of direct contact to the cleaning liquid, 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
Odour:	Slightly
<b>Odour threshold:</b>	<b>No data available</b>
pH:	<b>Not applicable</b>
<b>Melting point/freezing point:</b>	<b>No data available</b>
<b>Initial boiling point and boiling range:</b>	<b>No data available</b>
Flash point:	71-72 deg.C
Evaporation rate:	No data available
Flammability(solid, gas):	<b>Not applicable</b>
<b>Upper/lower flammability or explosive limits:</b>	Explosive limits: 1.3-9.9v/v% ( of Polyalkylene glycol monoalkyl ether)
Vapor pressure:	No data available
Vapor density:	>1
Relative density:	0.9-1.1 (g/cm <sup>3</sup> , 20°C)
Solubility:	No data available
<b>Solubility(ies):</b>	<b>Water solubility: Soluble</b>
Partition coefficient: n-octanol/water:	No data available
<b>Auto-ignition temperature:</b>	<b>No data available</b>
<b>Decomposition temperature:</b>	<b>No data available</b>
Viscosity:	No data available
<b>Explosive properties:</b>	<b>No data available</b>
<b>Oxidizing properties:</b>	<b>No data available</b>
<b>Volatile organic compounds (VOC) content:</b>	<b>980 gram/liter (maximum value)</b>

9.2. Other information: No information

## 10. Stability and reactivity

- 10.1. Reactivity: No reactivity under normal temperature
- 10.2. Chemical stability: Stable under normal temperature
- 10.3. Possibility of hazardous reactions: Not expected
- 10.4. Conditions to avoid: Elevated temperatures/heat, UV light, when not in use.
- 10.5. Incompatible materials: Avoid contact with acids, amines, free radical initiators, oxidizing agents.
- 10.6. Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

## 11. Toxicological information

### 11.1. Information on toxicological effects

Routes of Overexposure: Eye, skin, inhalation, and oral

Acute toxicity:

Polyalkylene glycol monoalkyl ether (of one component of this product)

Oral LD50	7.1mL/kg(Rabbit)
Dermal LD50	11.3mL/kg(Rat)
Inhalant LC50	No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitisation: No data available

Germ cell mutagenicity: No data available

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: No data available

STOT-repeated exposure: No data available

Aspiration hazard: No data available

## 12. Ecological information

- 12.1. Toxicity: No data available
- 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

## 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**

## 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: 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: None

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.