



### 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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
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
Colorants	C.B.I.	C.B.I.	N/A for the moment	1-5	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

### 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:	In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.
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 direct contact to ink, 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 direct contact to ink, 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:	Cyan Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

- 10.1. Reactivity: Stable under normal temperature  
10.2. Chemical stability: Stable under normal temperature  
10.3. Possibility of hazardous reactions: None  
10.4. Conditions to avoid: Avoid strong oxidizing agents and strong acid.  
10.5. Incompatible materials: No data available  
10.6. Hazardous decomposition products: No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

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

Acute toxicity:

Propylene carbonate (of one component of this product)

Oral LD50	>29000mg/kg(Rat)
Dermal LD50	>20mL/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: Has not carried out PBT and vPvB assessment.  
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.

US Information:

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

California Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

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:

H319 Causes serious eye irritation.

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.

## Safety Data Sheet

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

#### 1.1. Product identifier

ECO-SOL MAX3, ESL5-MG  
ECO-SOL MAX3, ESL5-5MG

#### 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: 21 December, 2015

#### 1.4. Emergency telephone:

### 2. Hazard identification

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

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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
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
Colorants	C.B.I.	C.B.I.	N/A for the moment	1-5	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

### 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:	In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.
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 direct contact to ink, 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 direct contact to ink, 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:	Magenta Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

- 10.1. Reactivity: Stable under normal temperature  
10.2. Chemical stability: Stable under normal temperature  
10.3. Possibility of hazardous reactions: None  
10.4. Conditions to avoid: Avoid strong oxidizing agents and strong acid.  
10.5. Incompatible materials: No data available  
10.6. Hazardous decomposition products: No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

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

Acute toxicity:

Propylene carbonate (of one component of this product)

Oral LD50	>29000mg/kg(Rat)
Dermal LD50	>20mL/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: Has not carried out PBT and vPvB assessment.  
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.

US Information:

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

California Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

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:

H319 Causes serious eye irritation.

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.

## Safety Data Sheet

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

#### 1.1. Product identifier

ECO-SOL MAX3, ESL5-YE  
ECO-SOL MAX3, ESL5-5YE

#### 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: 21 December, 2015

#### 1.4. Emergency telephone:

### 2. Hazard identification

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

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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
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
Yellow pigment	C.B.I.	C.B.I.	N/A for the moment	1-5	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

### 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:	In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.
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 direct contact to ink, 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 direct contact to ink, 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:	Yellow Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information



## 10. Stability and reactivity

- 10.1. Reactivity: Stable under normal temperature  
10.2. Chemical stability: Stable under normal temperature  
10.3. Possibility of hazardous reactions: None  
10.4. Conditions to avoid: Avoid strong oxidizing agents and strong acid.  
10.5. Incompatible materials: No data available  
10.6. Hazardous decomposition products: No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

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

Acute toxicity:

Propylene carbonate (of one component of this product)

Oral LD50	>29000mg/kg(Rat)
Dermal LD50	>20mL/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: Has not carried out PBT and vPvB assessment.  
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.

US Information:

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

California Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

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:

H319 Causes serious eye irritation.

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.



### 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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
Carcinogenicity:	The product contains Carbon black. IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans).

### 3. Composition/information on ingredients

**Chemical nature:** mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008
Carbon black	C.B.I.	C.B.I.	N/A for the moment	1-5	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

US:

components	OSHA:PEL	ACGIH:TLV
Carbon black	3.5mg/m <sup>3</sup>	3.5mg/m <sup>3</sup>

Australia: OELs

components	TWA
Carbon black	3mg/m <sup>3</sup>

### 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:

In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.

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 direct contact to ink, 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 direct contact to ink, 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:	Black Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

10.1. Reactivity:	Stable under normal temperature
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	None
10.4. Conditions to avoid:	Avoid strong oxidizing agents and strong acid.
10.5. Incompatible materials:	No data available
10.6. Hazardous decomposition products:	No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral	
Acute toxicity:		
Propylene carbonate (of one component of this product)		
	Oral LD50	>29000mg/kg(Rat)
	Dermal LD50	>20mL/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:	The product contains Carbon black. IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans.	
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:	Has not carried out PBT and vPvB assessment.
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.

### US Information:

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

California Proposition 65: Not regulated

### SARA TITLE III:

#### Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

### Australia Information:

Hazardous statement: Classified as hazardous according to NOHSC criteria.

### International Information:

The product contains Carbon black.

IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans).



**16. Other information**

List of relevant H-Statements:

H319 Causes serious eye irritation.

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.

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## Safety Data Sheet

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

#### 1.1. Product identifier

ECO-SOL MAX3, ESL5-5LC

#### 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: 21 December, 2015

#### 1.4. Emergency telephone:

### 2. Hazard identification

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

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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
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
Colorants	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

### 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:	In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.
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 direct contact to ink, 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 direct contact to ink, 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:	Cyan Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

- 10.1. Reactivity: Stable under normal temperature  
10.2. Chemical stability: Stable under normal temperature  
10.3. Possibility of hazardous reactions: None  
10.4. Conditions to avoid: Avoid strong oxidizing agents and strong acid.  
10.5. Incompatible materials: No data available  
10.6. Hazardous decomposition products: No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

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

Acute toxicity:

Propylene carbonate (of one component of this product)

Oral LD50	>29000mg/kg(Rat)
Dermal LD50	>20mL/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: Has not carried out PBT and vPvB assessment.  
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.

US Information:

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

California Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

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:

H319 Causes serious eye irritation.

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.

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## Safety Data Sheet

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

#### 1.1. Product identifier

ECO-SOL MAX3, ESL5-5LM

#### 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: 21 December, 2015

#### 1.4. Emergency telephone:

### 2. Hazard identification

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

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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
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
Colorants	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	60-70	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

#### 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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

### 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:	In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.
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 direct contact to ink, 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 direct contact to ink, 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:	Magenta Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

- 10.1. Reactivity: Stable under normal temperature  
10.2. Chemical stability: Stable under normal temperature  
10.3. Possibility of hazardous reactions: None  
10.4. Conditions to avoid: Avoid strong oxidizing agents and strong acid.  
10.5. Incompatible materials: No data available  
10.6. Hazardous decomposition products: No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

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

Acute toxicity:

Propylene carbonate (of one component of this product)

Oral LD50	>29000mg/kg(Rat)
Dermal LD50	>20mL/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: Has not carried out PBT and vPvB assessment.  
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.

US Information:

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

California Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

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:

H319 Causes serious eye irritation.

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.

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## Safety Data Sheet

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

#### 1.1. Product identifier

ECO-SOL MAX3, ESL5-5LK

#### 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: 21 December, 2015

#### 1.4. Emergency telephone:

### 2. Hazard identification

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

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.
Inhalation:	Exposure to vapors (mist) will cause respiratory irritation and anesthesia.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
Carcinogenicity:	The product contains Carbon black. IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans).

### 3. Composition/information on ingredients

**Chemical nature:** mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008
Carbon black	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous
Synthetic resins	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	70-80	Not classified as hazardous
Propylene carbonate	108-32-7	203-572-1	N/A for the moment	<10	Eye Irrit. 2: H319
Polyalkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-10	Not classified as hazardous
Others	C.B.I.	C.B.I.	N/A for the moment	<1	Not classified as hazardous

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

\*For the full text of the H-Statements mentioned in this Section, see Section 16.

### 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 mildly 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 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

Combustible liquid under Hazard Communication Standard (HCS, U.S.A).

Flash Point: 65-67 deg.C

#### 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

Soak up with sand or earth. 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. Keep out of reach of children and do not drink. Do not dismantle container. Make sure cartridge is dry before insertion into printer housing.

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:

EU: DNEL

components	Long term exposure	Short term exposure
Propylene carbonate	70.56 mg/m <sup>3</sup>	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

US:

components	OSHA:PEL	ACGIH:TLV
Carbon black	3.5mg/m <sup>3</sup>	3.5mg/m <sup>3</sup>

Australia: OELs

components	TWA
Carbon black	3mg/m <sup>3</sup>

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: In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge.

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.

Eye protection: Not required under suitable use as setting the cartridge on the printer. However, in case of direct contact to ink, 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 direct contact to ink, 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:	Black Liquid
Odor:	Slightly
pH:	Not applicable
Boiling point:	No data available
Flash point:	65-67 deg.C
Flammability(solid,gas):	Not applicable
Explosive properties:	Explosive limits: 1.8-14.3v/v% ( of Propylene carbonate)
Oxidizing properties:	None
Vapor pressure:	No data available
Specific Gravity (g/cm <sup>3</sup> , 20°C)	0.9-1.1
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	>1
Evaporation rate:	No data available
Melting point:	No data available

### 9.2. Other information: No information

## 10. Stability and reactivity

10.1. Reactivity:	Stable under normal temperature
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	None
10.4. Conditions to avoid:	Avoid strong oxidizing agents and strong acid.
10.5. Incompatible materials:	No data available
10.6. Hazardous decomposition products:	No data available

## 11. Toxicological information

### 11.1. Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral	
Acute toxicity:		
Propylene carbonate (of one component of this product)	Oral LD50	>29000mg/kg(Rat)
	Dermal LD50	>20mL/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:	The product contains Carbon black. IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans).	
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:	Has not carried out PBT and vPvB assessment.
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.

### US Information:

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

California Proposition 65: Not regulated

### SARA TITLE III:

#### Section 313:

Dialkylene glycol dialkyl ether (Chemical Category N230)

Polyalkylene glycol dialkyl ether (Chemical Category N230)

### Australia Information:

Hazardous statement: Classified as hazardous according to NOHSC criteria.

### International Information:

The product contains Carbon black.

IARC evaluated printing ink as a Group3(Not classifiable as to carcinogenicity to humans).

**16. Other information**

List of relevant H-Statements:

H319 Causes serious eye irritation.

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.