

Safety Data Sheet

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

1.1. Product identifier

EcoXtreme i, AI3-CY Ver.2

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

Manufacturer'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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is classified as dangerous according to EU Directive 1999/45/EC.

T	R61-62
Xi	R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
Causes skin irritation.
May damage fertility or the unborn child

Precautionary statement(s)

Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

2.3. Other hazards
Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
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.

3. Composition/information on ingredients
Chemical nature: mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	52-60	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	19-23	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	6-10	Repr. 1B: H360	T: R61-62
Resin	C.B.I.	C.B.I.	N/A for the moment	3-7	Not classified as hazardous	Not classified as hazardous
Pigment blue 15	147-14-8	205-685-1	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	2-4	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	2-4	Not classified as hazardous	Not classified as hazardous

*C.B.I.: Confidential Business Information

*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.
- Ingestion: May cause upset stomach.

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

No information

5. Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.
- Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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

Dike spill. 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. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink. Do not dismantle container. 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
Pigment blue 15	4.0mg/m ³	-
Tetraethylene glycol dimethyl ether	22mg/m ³	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

8.2. Exposure controls:

Occupational exposure control: Provide general and/or local exhaust 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:	Blue liquid
Odor:	Slight Solvent odor
pH:	No data available
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)
Melting point:	No data available
Flash point:	70 deg.C (T.C.C.)
Explosive properties:	
explosive limit	lower limits: 0.6vol% upper limits 13.0vol% (Diethylene glycol diethyl ether) lower limits 2.5vol% upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)
Vapor density:	No data available
Relative density:	0.960 at 25deg.C
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Melting point:	No data available

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon, copper and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral	
Acute Health Hazards:		
1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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:	Negative (by Ames Test)
Reproductive toxicity:	No data available Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)
Carcinogenicity:	None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)
STOT-single exposure:	Overexposure of eye may be irritating. Overexposure of skin may cause irritation and in some people swelling and redness. Inhalation may result in respiratory irritation and anesthesia. Ingestion may cause an upset stomach.
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available

12. Ecological information

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:

This product is considered as a hazardous waste according to Directive 2008/98/EC.

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 applicable
14.2. UN proper shipping name:	
ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.3. Transport hazard class(es):	
ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.4. Packing group:	
ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.5. Environmental hazards:	
ADR/ADG/DOT, IMDG, or IATA :	Not applicable
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 applicable

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

EcoXtreme i, AI3-MG Ver.2

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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is classified as dangerous according to EU Directive 1999/45/EC.

T	R61-62
Xi	R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
 Causes skin irritation.
 May damage fertility or the unborn child

Precautionary statement(s)

Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

Contains Poly[oxy(methyl-1,2-ethanediyl)], .alpha...alpha.'.alpha."-1,2,3-propanetriyltris[.omega.-[(1-oxo-2-propenyl)oxy]]-. May produce an allergic reaction.

2.3. Other hazards

Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
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.

3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	48-56	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	20-25	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	8-11	Repr. 1B: H360	T: R61-62
Pigment red 122	980-26-7	213-561-3	N/A for the moment	4-7	Not classified as hazardous	Not classified as hazardous
Resin	C.B.I.	C.B.I.	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	2-3	Not classified as hazardous	Not classified as hazardous

*C.B.I.: Confidential Business Information

*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.

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

No information

5. Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.
- Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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.

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:	Slight Solvent odor
pH:	No data available
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)
Melting point:	No data available
Flash point:	70 deg.C (T.C.C.)
Explosive properties:	
explosive limit	lower limits: 0.6vol% upper limits 13.0vol% (Diethylene glycol diethyl ether) lower limits 2.5vol% upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)
Vapor density:	No data available
Relative density:	0.961 at 25deg.C
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Melting point:	No data available

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral	
Acute Health Hazards:		
1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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:	Negative (by Ames Test)	
Reproductive toxicity:	No data available Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)	
Carcinogenicity:	None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)	
STOT-single exposure:	Overexposure of eye may be irritating. Overexposure of skin may cause irritation and in some people swelling and redness. Inhalation may result in respiratory irritation and anesthesia. Ingestion may cause an upset stomach.	
STOT-repeated exposure:	No data available	
Aspiration hazard:	No data available	

12. Ecological information

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:

This product is considered as a hazardous waste according to Directive 2008/98/EC.

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 applicable
- 14.2. UN proper shipping name:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.3. Transport hazard class(es):
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.4. Packing group:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.5. Environmental hazards:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 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 applicable

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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.

16. Other information

List of relevant H-Statements:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

EcoXtreme i, AI3-YE Ver.2

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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is classified as dangerous according to EU Directive 1999/45/EC.

T R61-62
Xi R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
Causes skin irritation.
May damage fertility or the unborn child

Precautionary statement(s)

Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
Ingestion:	May cause upset stomach.
Chronic Health Hazards:	None Known.
Carcinogenicity:	The product contains Nickel compounds. 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	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	48-56	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	20-25	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	8-11	Repr. 1B: H360	T: R61-62
Pigment yellow 150	68511-62-6	270-944-8	N/A for the moment	4-7	Not classified as hazardous	Not classified as hazardous
Resin	C.B.I.	C.B.I.	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	2-4	Not classified as hazardous	Not classified as hazardous

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*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.
- Ingestion: May cause upset stomach.

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

No information

5. Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.
- Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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.

8.2. Exposure controls:

Occupational exposure control:	Provide general and/or local exhaust 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:	Yellow liquid
Odor:	Slight Solvent odor
pH:	No data available
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)
Melting point:	No data available
Flash point:	70 deg.C (T.C.C.)
Explosive properties:	
explosive limit	lower limits: 0.6vol% upper limits 13.0vol% (Diethylene glycol diethyl ether) lower limits 2.5vol% upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)
Vapor density:	No data available
Relative density:	0.966 at 25deg.C
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Melting point:	No data available

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon, nickel and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

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

Acute Health Hazards:

1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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: Negative (by Ames Test)

Reproductive toxicity: No data available

Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)

Carcinogenicity: The product contains Nickel compounds.

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

STOT-single exposure: Overexposure of eye may be irritating.

Overexposure of skin may cause irritation and in some people swelling and redness.

Inhalation may result in respiratory irritation and anesthesia.

Ingestion may cause an upset stomach.

STOT-repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological information

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:

This product is considered as a hazardous waste according to Directive 2008/98/EC.

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 applicable
- 14.2. UN proper shipping name:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.3. Transport hazard class(es):
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.4. Packing group:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.5. Environmental hazards:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 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 applicable

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Pigment yellow150 (Nickel Compounds)

SARA TITLE III:

Section 313:

Pigment yellow150 (Nickel Compounds) (Category Code N495)

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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:

The product contains Nickel compounds.

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

16. Other information

List of relevant H-Statements:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

EcoXtreme i, AI3-BK Ver.2

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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is classified as dangerous according to EU Directive 1999/45/EC.

T R61-62

Xi R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
Causes skin irritation.
May damage fertility or the unborn child

Precautionary statement(s)	
Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
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	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	50-59	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	18-24	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	6-10	Repr. 1B: H360	T: R61-62
Resin	C.B.I.	C.B.I.	N/A for the moment	4-6	Not classified as hazardous	Not classified as hazardous
Carbon black	1333-86-4	215-609-9	N/A for the moment	3-5	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	2-4	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	2-4	Not classified as hazardous	Not classified as hazardous
Pigment blue 15	147-14-8	205-685-1	N/A for the moment	1-2	Not classified as hazardous	Not classified as hazardous

*C.B.I.: Confidential Business Information

*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.
- Ingestion: May cause upset stomach.

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

No information

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.

Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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

Dike spill. 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. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink. Do not dismantle container. 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
Carbon black	2mg/m ³	-
Pigment blue 15	4.0mg/m ³	-
Tetraethylene glycol dimethyl ether	22mg/m ³	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

US:

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

Australia: OELs

components	TWA
Carbon black	3mg/m ³

8.2 . Exposure controls:

Occupational exposure control: Provide general and/or local exhaust 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:	Slight Solvent odor
pH:	No data available
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)
Melting point:	No data available
Flash point:	70 deg.C (T.C.C.)
Explosive properties:	
explosive limit	lower limits: 0.6vol% upper limits 13.0vol% (Diethylene glycol diethyl ether) lower limits 2.5vol% upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)
Vapor density:	No data available
Relative density:	0.966 at 25deg.C
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Melting point:	No data available

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon, copper and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

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

Acute toxicity:

1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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: Negative (by Ames Test)

Reproductive toxicity: No data available

Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)

Carcinogenicity: The product contains Carbon black.

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

STOT-single exposure: Overexposure of eye may be irritating.

Overexposure of skin may cause irritation and in some people swelling and redness.

Inhalation may result in respiratory irritation and anesthesia.

Ingestion may cause an upset stomach.

STOT-repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological information

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:

This product is considered as a hazardous waste according to Directive 2008/98/EC.

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 applicable
- 14.2. UN proper shipping name:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.3. Transport hazard class(es):
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.4. Packing group:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 14.5. Environmental hazards:
ADR/ADG/DOT, IMDG, or IATA : Not applicable
- 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 applicable

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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:

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:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

EcoXtreme i, AI3-LC Ver.2

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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture

This product is classified as dangerous according to EU Directive 1999/45/EC.

T R61-62

Xi R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
 Causes skin irritation.
 May damage fertility or the unborn child

Precautionary statement(s)

Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
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.

3. Composition/information on ingredients
Chemical nature: mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	55-65	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	18-25	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	6-10	Repr. 1B: H360	T: R61-62
Resin	C.B.I.	C.B.I.	N/A for the moment	5-8	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	2.5-4	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	0.5-1	Not classified as hazardous	Not classified as hazardous
Pigment blue 15	147-14-8	205-685-1	N/A for the moment	0.5-1	Not classified as hazardous	Not classified as hazardous

*C.B.I.: Confidential Business Information

*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.
- Ingestion: May cause upset stomach.

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

No information

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.

Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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

Dike spill. 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. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink. Do not dismantle container. 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
Pigment blue 15	4.0mg/m ³	-
Tetraethylene glycol dimethyl ether	22mg/m ³	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

8.2. Exposure controls:

Occupational exposure control: Provide general and/or local exhaust ventilation.

Personal protective equipment:

Respiratory protection: In case ventilation is insufficient, wear respiratory protection. Use a half facepiece respirator (with gollges) 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:	Light Blue liquid
Odor:	Slight Solvent odor
pH:	No data available
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)

Melting point:	No data available
Flash point:	70 deg.C (T.C.C.)
Explosive properties: explosive limit	lower limits: 0.6vol% upper limits 13.0vol% (Diethylene glycol diethyl ether) lower limits 2.5vol% upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)
Vapor density:	No data available
Relative density:	0.946 at 25deg.C
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)
Solubility in fat:	No data available
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Melting point:	No data available

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon, copper and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

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

Acute Health Hazards:

1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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: Negative (by Ames Test)

Reproductive toxicity: No data available

Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)

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

STOT-single exposure:	Overexposure of eye may be irritating. Overexposure of skin may cause irritation and in some people swelling and redness. Inhalation may result in respiratory irritation and anesthesia. Ingestion may cause an upset stomach.
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available

12. Ecological information

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:
This product is considered as a hazardous waste according to Directive 2008/98/EC.
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 applicable |
| 14.2. UN proper shipping name:
ADR/ADG/DOT, IMDG, or IATA : | Not applicable |
| 14.3. Transport hazard class(es):
ADR/ADG/DOT, IMDG, or IATA : | Not applicable |
| 14.4. Packing group:
ADR/ADG/DOT, IMDG, or IATA : | Not applicable |
| 14.5. Environmental hazards:
ADR/ADG/DOT, IMDG, or IATA : | Not applicable |
| 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 applicable |

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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.

16. Other information

List of relevant H-Statements:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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

EcoXtreme i, AI3-LM Ver.2

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:

Revision: 17 December, 2014

1.4. Emergency telephone:

2. Hazard identification

This product is classified as dangerous according to EU Directive 1999/45/EC.

T	R61-62
Xi	R38

This product is classified as dangerous according to GHS.

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Toxic to reproduction	Category 1B

2.2. GHS label elements, including precautionary statements

Pictogram



Signal word(s)

Danger

Hazard statement(s)

Combustible liquid.
 Causes skin irritation.
 May damage fertility or the unborn child

Precautionary statement(s)	
Prevention	Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Potential Health Effects:

Eyes:	Contact with eye will be irritating.
Skin:	Contact with skin may cause irritation, swelling or redness.
Inhalation:	Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility.
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.

3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	EC No.	EU registration No.	% By Weight	Classification EC No. 1272/2008	Classification 67/548/EEC
Diethylene glycol diethyl ether	112-36-7	203-963-7	N/A for the moment	53-62	Skin Irrit. 2: H315	Xi: R38
Dialkylene glycol dialkyl ether	C.B.I.	C.B.I.	N/A for the moment	20-25	Not classified as hazardous	Not classified as hazardous
Tetraethylene glycol dimethyl ether	143-24-8	205-594-7	N/A for the moment	7-11	Repr. 1B: H360	T: R61-62
Resin	C.B.I.	C.B.I.	N/A for the moment	5-8	Not classified as hazardous	Not classified as hazardous
Polyalkylene glycol monoalkyl ether	C.B.I.	C.B.I.	N/A for the moment	1-4	Not classified as hazardous	Not classified as hazardous
Pigment red 122	980-26-7	213-561-3	N/A for the moment	0.5-1.5	Not classified as hazardous	Not classified as hazardous
Dispersant	C.B.I.	C.B.I.	N/A for the moment	0.5-1.5	Not classified as hazardous	Not classified as hazardous

*C.B.I.: Confidential Business Information

*For the full text of the H-Statements and R-phrases 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: May cause severe eye irritation.
- Skin: Contact with skin may cause irritation, swelling or redness.
- Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be harmful to the unborn child and at the risk of impaired fertility.
- Ingestion: May cause upset stomach.

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

No information

5. Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media:
Water spray, dry chemical, CO₂ or foam.
- Unsuitable extinguishing media:
No information

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Oxides of carbon, copper and nitrogen.
Combustible liquid under Hazard Communication Standard (HCS, U.S.A).
Flash Point: 70 deg.C (T.C.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

Dike spill. 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. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink. Do not dismantle container. 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
Tetraethylene glycol dimethyl ether	22mg/m ³	-

REACH Toxicological Information (Workers - Hazard via inhalation route)

8.2. Exposure controls:

Occupational exposure control: Provide general and/or local exhaust 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:	Light Magenta liquid	
Odor:	Slight Solvent odor	
pH:	No data available	
Boiling point:	188.9 deg.C (Diethylene glycol diethyl ether) 176.0 deg.C (Dialkylene glycol dialkyl ether)	
Melting point:	No data available	
Flash point:	70 deg.C (T.C.C.)	
Explosive properties:		
explosive limit	lower limits: 0.6vol%	upper limits 13.0vol% (Diethylene glycol diethyl ether)
	lower limits 2.5vol%	upper limits 33.0vol% (Dialkylene glycol dialkyl ether)
Oxidizing properties:	No data available	
Vapor pressure:	0.38mmHg (20deg.C) (Diethylene glycol diethyl ether)	
Vapor density:	No data available	
Relative density:	0.947 at 25deg.C	
Solubility in Water:	Easily soluble (Diethylene glycol diethyl ether) Fusibility (Dialkylene glycol dialkyl ether)	
Solubility in fat:	No data available	
Partition coefficient: n-octanol/water:	No data available	
Viscosity:	No data available	
Melting point:	No data available	

9.2. Other information: No information

10. Stability and reactivity

10.1. Reactivity:	No data available
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	Not expected
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Acids and oxidizing agents
10.6. Hazardous decomposition products:	Thermal decomposition will produce oxides of carbon and nitrogen.

11. Toxicological information

*Based on toxicology data of chemically similar material

11.1. Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral	
Acute Health Hazards:		
1) Diethylene glycol diethyl ether	Oral LD50	4970mg/kg (Rat)*
	Dermal LD50	6097mg/kg (Rabbit)*
	Inhalant LC50	No data available
2) Dialkylene glycol dialkyl ether	Oral LD50	6000mg/kg (Rat)*
	Dermal LD50	6526mg/kg (Rabbit)*
	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:	Negative (by Ames Test)
Reproductive toxicity:	No data available Suspected of damaging fertility or the unborn child.(Tetraethylene glycol dimethyl ether and a similar chemical)
Carcinogenicity:	None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)
STOT-single exposure:	Overexposure of eye may be irritating. Overexposure of skin may cause irritation and in some people swelling and redness. Inhalation may result in respiratory irritation and anesthesia. Ingestion may cause an upset stomach.
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available

12. Ecological information

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:
This product is considered as a hazardous waste according to Directive 2008/98/EC.
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 applicable
14.2. UN proper shipping name: ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.3. Transport hazard class(es): ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.4. Packing group: ADR/ADG/DOT, IMDG, or IATA :	Not applicable
14.5. Environmental hazards: ADR/ADG/DOT, IMDG, or IATA :	Not applicable
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 applicable

15. Regulatory information

US information:

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

Product contains Diethylene glycol diethyl ether that is subject to TSCA Section 5 SNUR and to TSCA Section 12(b) export notification requirements.

Product contains Tetraethylene glycol dimethyl ether that is subject to TSCA Section 5 proposed SNUR and to TSCA Section 12(b) export notification requirements.

California; Proposition 65: Not regulated

SARA TITLE III:

Section 313:

Diethylene glycol diethyl ether (Chemical Category N230)

Dialkylene glycol dialkyl ether (Chemical Category N230)

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.

16. Other information

List of relevant H-Statements:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

List of relevant R-phrases:

R38 Irritating to skin.

R61 May cause harm to the unborn child.

R62 Possible risk of impaired fertility.

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.