
Safety Data Sheet

1. Product and Company Identification

Product name:

TPG-CY

Manufacturer:

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

Distributor:

Roland DGA Corporation

Address:

15363 Barranca Parkway Irvine, CA 92618-2201
U.S.A.

Phone:

949-727-2100

Fax:

949 727 2112

Emergency telephone:

949-727-2100

Use of the product:

Inkjet Printing

Date of issue:

December 25, 2018

2. Hazard Identification

2.1 Emergency Overview:

Appearance and odor:

Cyan liquid and slight odor

This product is not classified as dangerous according to GHS.

GHS label elements, including precautionary statements

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

2.2. OSHA regulatory status

This product is not considered hazardous material by the OSHA Communication Standard (29 CFR 1910.1200)

2.3. Potential health effects

Eyes:

Contact with eye will be irritating.

Skin:

Contact with skin may cause irritation, swelling or redness, allergic sensitization.

Inhalation:

Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion:

May cause injury of mouth, throat, and stomach.

Chronic Health Hazards:

Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity:

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

See section 11 for more information.

2.4. Potential environmental effects

See section 12 for Ecological information.

3. Composition/Information on Ingredients

Composition	CAS No.	% By Weight	Classification HCS
Ethylene glycol	107-21-1	1 - 10	Acute Tox. 4: H302
Glycerol compound	C.B.I.	20 - 30	Not classified as hazardous
Water	7732-18-5	55 - 75	Not classified as hazardous

*C.B.I.: Confidential Business Information

Additional information: Chemical name and exact concentrations are being withheld as trade secrets.

4. First Aid Measures

4.1. First aid procedures

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

4.2. Note to physicians

May cause skin and eye irritation. Excessive inhalation of mist will cause respiratory irritation.

5. Fire Fighting Measures

5.1. Flammable properties:

Flash point: > 200 deg.F

5.2. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

No data available

5.3. Protection of fire fighters

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

Flash Point: >200 deg.F

Protective equipment and precautions for firefighters

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus(SCBA).

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Applying direct water may be dangerous because fire may expand to surroundings.

6. Accidental Release Measures

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

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 for containment

Dike spilled product.

6.4. Methods for Clean-up

Sweep up material and dispose as waste following local regulations.

6.5. Other information

No information

6.6. Spill or leak statements by type of chemical

Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Absorb and/or contain spill with inert sand, then place in suitable container. For large spills; use water spray to disperse vapors and dilute spill to a nonflammable mixture. Do not flush to sewer. Prevent run-off from entering drains, sewers or waterways.

7. Handling And Storage

7.1. 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.

7.2. Storage

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

8. Exposure Controls/Personal Protection

8.1. Exposure Guidelines

Occupational Exposure Limits:

US:

components	OSHA:PEL	ACGIH:TLV
Ethylene glycol (Aerosol only)	-	100mg/m ³ (ceiling)
Glycerol (mist)	15mg/m ³	10mg/m ³

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

components	PEL
Ethylene glycol (vapor)	40ppm, 100mg/m ³

8.2. Engineering controls:

Provide general and/or local exhaust ventilation.

8.3. Personal protective equipment (PPE)

Eye/face protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear safety glasses or chemical splash goggles.
Hand protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Skin protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General 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.

9. Physical and Chemical Properties

Appearance:	Cyan Liquid
Odor:	Slightly
pH:	8 - 10 at 77 deg.F
Boiling point:	No data available
Flash point:	> 200 deg.F
Flammability(solid,gas):	None
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	No data available
Relative density:	About 1.1 at 73.4 deg.F
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Melting point:	No data available
Volatile organic compounds (VOC) content:	490 gram/liter (maximum value)

10. Stability and Reactivity

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

11. Toxicological Information

Acute toxicity:

Oral LD50	5000 or over [mg/kg] (Rat) (OECD TG 423)
Dermal LD50	No data available
Inhalant LC50	No data available

Skin corrosion/irritation: ≤ 1.0 (Rabbit) (OECD TG 404)

Serious eye damage/eye irritation: Non-irritant (OECD TG 405)

Respiratory or skin sensitisation: 0% (OECD TG 429)

Germ cell mutagenicity: Negative (by Ames Test)

Reproductive toxicity: No data available

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

STOT-single exposure: No data available.

STOT-repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological Information

Ecotoxicity: No data available

Persistence/Degradability: No data available

Bioaccumulation/Accumulation: No data available

Mobility in environment media: No data available

Other adverse effects: No data available

13. Disposal Considerations

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

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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

14.5. Environmental hazards

DOT/ADR/ADG, 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 MARPC Not regulated

Not applicable

15. Regulatory Information

US Information:

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

California Proposition 65:

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov.

SARA TITLE III:

Section 313:

Ethylene glycol

16. Other Information

NFPA 704: Hazard Rating System

Health - 1 , Flammable - 0 , Reactivity - 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

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. Product and Company Identification

Product name:

TPG-MG

Manufacturer:

Address:

Roland DG Corporation

1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi,
Shizuoka-ken, 431-2103
JAPAN

Phone:

+ 81-53-484-1224

Fax:

+ 81-53-484-1226

Distributor:

Address:

Roland DGA Corporation

15363 Barranca Parkway Irvine, CA 92618-2201
U.S.A.

Phone:

949-727-2100

Fax:

949 727 2112

Emergency telephone:

949-727-2100

Use of the product:

Inkjet Printing

Date of issue:

December 25, 2018

2. Hazard Identification

2.1 Emergency Overview:

Appearance and odor:

Magenta liquid and slight odor

This product is not classified as dangerous according to GHS.

GHS label elements, including precautionary statements

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

2.2. OSHA regulatory status

This product is not considered hazardous material by the OSHA Communication Standard (29 CFR 1910.1200)

2.3. Potential health effects

Eyes:

Contact with eye will be irritating.

Skin:

Contact with skin may cause irritation, swelling or redness, allergic sensitization.

Inhalation:

Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion:

May cause injury of mouth, throat, and stomach.

Chronic Health Hazards:

Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity:

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

See section 11 for more information.

2.4. Potential environmental effects

See section 12 for Ecological information.

3. Composition/Information on Ingredients

Composition	CAS No.	% By Weight	Classification HCS
Ethylene glycol	107-21-1	1 - 10	Acute Tox. 4: H302
Glycerol compound	C.B.I.	20 - 30	Not classified as hazardous
Water	7732-18-5	60 - 80	Not classified as hazardous

*C.B.I.: Confidential Business Information

Additional information: Chemical name and exact concentrations are being withheld as trade secrets.

4. First Aid Measures

4.1. First aid procedures

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

4.2. Note to physicians

May cause skin and eye irritation. Excessive inhalation of mist will cause respiratory irritation.

5. Fire Fighting Measures

5.1. Flammable properties:

Flash point: > 200 deg.F

5.2. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

No data available

5.3. Protection of fire fighters

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

Flash Point: >200 deg.F

Protective equipment and precautions for firefighters

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus(SCBA).

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Applying direct water may be dangerous because fire may expand to surroundings.

6. Accidental Release Measures

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

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 for containment

Dike spilled product.

6.4. Methods for Clean-up

Sweep up material and dispose as waste following local regulations.

6.5. Other information

No information

6.6. Spill or leak statements by type of chemical

Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Absorb and/or contain spill with inert sand, then place in suitable container. For large spills; use water spray to disperse vapors and dilute spill to a nonflammable mixture. Do not flush to sewer. Prevent run-off from entering drains, sewers or waterways.

7. Handling And Storage

7.1. 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.

7.2. Storage

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

8. Exposure Controls/Personal Protection

8.1. Exposure Guidelines

Occupational Exposure Limits:

US:

components	OSHA:PEL	ACGIH:TLV
Ethylene glycol (Aerosol only)	-	100mg/m ³ (ceiling)
Glycerol (mist)	15mg/m ³	10mg/m ³

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

components	PEL
Ethylene glycol (vapor)	40ppm, 100mg/m ³

8.2. Engineering controls:

Provide general and/or local exhaust ventilation.

8.3. Personal protective equipment (PPE)

Eye/face protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear safety glasses or chemical splash goggles.
Hand protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Skin protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General 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.

9. Physical and Chemical Properties

Appearance:	Magenta Liquid
Odor:	Slightly
pH:	8 - 10 at 77 deg.F
Boiling point:	No data available
Flash point:	> 200 deg.F
Flammability(solid,gas):	None
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	No data available
Relative density:	About 1.1 at 73.4 deg.F
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Melting point:	No data available
Volatile organic compounds (VOC) content:	430 gram/liter (maximum value)

10. Stability and Reactivity

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

11. Toxicological Information

Acute toxicity:

Oral LD50	5000 or over [mg/kg] (Rat) (OECD TG 423)
Dermal LD50	No data available
Inhalant LC50	No data available

Skin corrosion/irritation: ≤ 1.0 (Rabbit) (OECD TG 404)

Serious eye damage/eye irritation: Non-irritant (OECD TG 405)

Respiratory or skin sensitisation: 0% (OECD TG 429)

Germ cell mutagenicity: Negative (by Ames Test)

Reproductive toxicity: No data available

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

STOT-single exposure: No data available.

STOT-repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological Information

Ecotoxicity: No data available

Persistence/Degradability: No data available

Bioaccumulation/Accumulation: No data available

Mobility in environment media: No data available

Other adverse effects: No data available

13. Disposal Considerations

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

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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

14.5. Environmental hazards

DOT/ADR/ADG, 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 MARPC Not regulated

Not applicable

15. Regulatory Information

US Information:

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

California Proposition 65:

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov.

SARA TITLE III:

Section 313:

Ethylene glycol

16. Other Information

NFPA 704: Hazard Rating System

Health - 1 , Flammable - 0 , Reactivity - 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

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. Product and Company Identification

Product name:

TPG-YE

Manufacturer:

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

Distributor:

Roland DGA Corporation

Address:

15363 Barranca Parkway Irvine, CA 92618-2201
U.S.A.

Phone:

949-727-2100

Fax:

949 727 2112

Emergency telephone:

949-727-2100

Use of the product:

Inkjet Printing

Date of issue:

December 25, 2018

2. Hazard Identification

2.1 Emergency Overview:

Appearance and odor:

Yellow liquid and slight odor

This product is not classified as dangerous according to GHS.

GHS label elements, including precautionary statements

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

2.2. OSHA regulatory status

This product is not considered hazardous material by the OSHA Communication Standard (29 CFR 1910.1200)

2.3. Potential health effects

Eyes:

Contact with eye will be irritating.

Skin:

Contact with skin may cause irritation, swelling or redness, allergic sensitization.

Inhalation:

Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion:

May cause injury of mouth, throat, and stomach.

Chronic Health Hazards:

Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity:

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

See section 11 for more information.

2.4. Potential environmental effects

See section 12 for Ecological information.

3. Composition/Information on Ingredients

Composition	CAS No.	% By Weight	Classification HCS
Ethylene glycol	107-21-1	1 - 10	Acute Tox. 4: H302
2-Pyrrolidione	616-45-5	1 - 5	Eye Irrit. 2: H319
Glycerol compound	C.B.I.	20 - 30	Not classified as hazardous
Water	7732-18-5	60 - 80	Not classified as hazardous

*C.B.I.: Confidential Business Information

Additional information: Chemical name and exact concentrations are being withheld as trade secrets.

4. First Aid Measures

4.1. First aid procedures

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

4.2. Note to physicians

May cause skin and eye irritation. Excessive inhalation of mist will cause respiratory irritation.

5. Fire Fighting Measures

5.1. Flammable properties:

Flash point: > 200 deg.F

5.2. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

No data available

5.3. Protection of fire fighters

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

Flash Point: >200 deg.F

Protective equipment and precautions for firefighters

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

6. Accidental Release Measures

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

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 for containment

Dike spilled product.

6.4. Methods for Clean-up

Sweep up material and dispose as waste following local regulations.

6.5. Other information

No information

6.6. Spill or leak statements by type of chemical

Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Absorb and/or contain spill with inert sand, then place in suitable container. For large spills; use water spray to disperse vapors and dilute spill to a nonflammable mixture. Do not flush to sewer. Prevent run-off from entering drains, sewers or waterways.

7. Handling And Storage

7.1. 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.

7.2. Storage

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

8. Exposure Controls/Personal Protection

8.1. Exposure Guidelines

Occupational Exposure Limits:

US:

components	OSHA:PEL	ACGIH:TLV
Ethylene glycol (Aerosol only)	-	100mg/m ³ (ceiling)
Glycerol (mist)	15mg/m ³	10mg/m ³

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

components	PEL
Ethylene glycol (vapor)	40ppm, 100mg/m ³

8.2. Engineering controls:

Provide general and/or local exhaust ventilation.

8.3. Personal protective equipment (PPE)

Eye/face protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear safety glasses or chemical splash goggles.
Hand protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Skin protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General 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.

9. Physical and Chemical Properties

Appearance:	Yellow Liquid
Odor:	Slightly
pH:	8 - 10 at 77 deg.F
Boiling point:	No data available
Flash point:	> 200 deg.F
Flammability(solid,gas):	None
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	No data available
Relative density:	About 1.1 at 73.4 deg.F
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Melting point:	No data available
Volatile organic compounds (VOC) content:	440 gram/liter (maximum value)

10. Stability and Reactivity

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

11. Toxicological Information

Acute toxicity:

Oral LD50	5000 or over [mg/kg] (Rat) (OECD TG 423)
Dermal LD50	No data available
Inhalant LC50	No data available

Skin corrosion/irritation: ≤ 1.0 (Rabbit) (OECD TG 404)

Serious eye damage/eye irritation: Non-irritant (OECD TG 405)

Respiratory or skin sensitisation: 0% (OECD TG 429)

Germ cell mutagenicity: Negative (by Ames Test)

Reproductive toxicity: No data available

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

STOT-single exposure: No data available.

STOT-repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological Information

Ecotoxicity: No data available

Persistence/Degradability: No data available

Bioaccumulation/Accumulation: No data available

Mobility in environment media: No data available

Other adverse effects: No data available

13. Disposal Considerations

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

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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

14.5. Environmental hazards

DOT/ADR/ADG, 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 MARPC

Not regulated
Not applicable

15. Regulatory Information

US Information:

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

California Proposition 65:

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov.

SARA TITLE III:

Section 313:

Ethylene glycol

16. Other Information

NFPA 704: Hazard Rating System

Health - 1 , Flammable - 0 , Reactivity - 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

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. Product and Company Identification

Product name:

TPG-BK

Manufacturer:

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

Distributor:

Roland DGA Corporation

Address:

15363 Barranca Parkway Irvine, CA 92618-2201
U.S.A.

Phone:

949-727-2100

Fax:

949 727 2112

Emergency telephone:

949-727-2100

Use of the product:

Inkjet Printing

Date of issue:

December 25, 2018

2. Hazard Identification

2.1 Emergency Overview:

Appearance and odor:

Black liquid and slight odor

This product is not classified as dangerous according to GHS.

GHS label elements, including precautionary statements

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

2.2. OSHA regulatory status

This product is not considered hazardous material by the OSHA Communication Standard (29 CFR 1910.1200)

2.3. Potential health effects

Eyes:

Contact with eye will be irritating.

Skin:

Contact with skin may cause irritation, swelling or redness, allergic sensitization.

Inhalation:

Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion:

May cause injury of mouth, throat, and stomach.

Chronic Health Hazards:

Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity:

The product contains Carbon black.

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

See section 11 for more information.

2.4. Potential environmental effects

See section 12 for Ecological information.

3. Composition/Information on Ingredients

Composition	CAS No.	% By Weight	Classification HCS
Carbon black	C.B.I.	1 - 10	Not classified as hazardous
Ethylene glycol	107-21-1	1 - 10	Acute Tox. 4: H302
Glycerol compound	C.B.I.	30 - 40	Not classified as hazardous
Water	7732-18-5	45 - 65	Not classified as hazardous

*C.B.I.: Confidential Business Information

Additional information: Chemical name and exact concentrations are being withheld as trade secrets.

4. First Aid Measures

4.1. First aid procedures

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

4.2. Note to physicians

May cause skin and eye irritation. Excessive inhalation of mist will cause respiratory irritation.

5. Fire Fighting Measures

5.1. Flammable properties:

Flash point: > 200 deg.F

5.2. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

No data available

5.3. Protection of fire fighters

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

Flash Point: >200 deg.F

Protective equipment and precautions for firefighters

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

6. Accidental Release Measures

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

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 for containment

Dike spilled product.

6.4. Methods for Clean-up

Sweep up material and dispose as waste following local regulations.

6.5. Other information

No information

6.6. Spill or leak statements by type of chemical

Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Absorb and/or contain spill with inert sand, then place in suitable container. For large spills; use water spray to disperse vapors and dilute spill to a nonflammable mixture. Do not flush to sewer. Prevent run-off from entering drains, sewers or waterways.

7. Handling And Storage

7.1. 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.

7.2. Storage

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

8. Exposure Controls/Personal Protection

8.1. Exposure Guidelines

Occupational Exposure Limits:

US:

components	OSHA:PEL	ACGIH:TLV
Carbon black	3.5mg/m ³	3.5mg/m ³
Ethylene glycol (Aerosol only)	-	100mg/m ³ (ceiling)
Glycerol (mist)	15mg/m ³	10mg/m ³

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

components	PEL
Carbon black	3.5mg/m ³
Ethylene glycol (vapor)	40ppm, 100mg/m ³

8.2. Engineering controls:

Provide general and/or local exhaust ventilation.

8.3. Personal protective equipment (PPE)

Eye/face protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear safety glasses or chemical splash goggles.
Hand protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Skin protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General 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.

9. Physical and Chemical Properties

Appearance:	Back Liquid
Odor:	Slightly
pH:	8 - 10 at 77 deg.F
Boiling point:	No data available
Flash point:	> 200 deg.F
Flammability(solid,gas):	None
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	No data available
Relative density:	About 1.1 at 73.4 deg.F
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Melting point:	No data available
Volatile organic compounds (VOC) content:	600 gram/liter (maximum value)

10. Stability and Reactivity

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

11. Toxicological Information

Acute toxicity:

Oral LD50	5000 or over [mg/kg] (Rat) (OECD TG 423)
Dermal LD50	No data available
Inhalant LC50	No data available

Skin corrosion/irritation: ≤ 1.0 (Rabbit) (OECD TG 404)

Serious eye damage/eye irritation: Non-irritant (OECD TG 405)

Respiratory or skin sensitisation: 0% (OECD TG 429)

Germ cell mutagenicity: Negative (by Ames Test)

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

Ecotoxicity: No data available

Persistence/Degradability: No data available

Bioaccumulation/Accumulation: No data available

Mobility in environment media: No data available

Other adverse effects: No data available

13. Disposal Considerations

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

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packing group

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

14.5. Environmental hazards

DOT/ADR/ADG, 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 MARPC Not regulated

Not applicable

15. Regulatory Information

US Information:

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

California Proposition 65:

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov.

SARA TITLE III:

Section 313:

Ethylene glycol

16. Other Information

NFPA 704: Hazard Rating System

Health - 1 , Flammable - 0 , Reactivity - 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

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Safety Data Sheet

1. Product and Company Identification

Product name:

BT-CC-CY
BT-CC-MG
BT-CC-YE
BT-CC-BK
BT-CL

Manufacturer:

Address:

Roland DG Corporation
1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi,
Shizuoka-ken, 431-2103
JAPAN

Phone:

+ 81-53-484-1224

Fax:

+ 81-53-484-1226

Distributor:

Address:

Roland DGA Corporation
15363 Barranca Parkway Irvine, CA 92618-2201
U.S.A.

Phone:

949-727-2100

Fax:

949 727 2112

Emergency telephone:

949-727-2100

Use of the product:

Cleaning liquid

Date of issue:

December 25, 2018

2. Hazard Identification

2.1 Emergency Overview:

Appearance and odor:

Clear liquid and slight odor

This product is not classified as dangerous according to GHS.

GHS label elements, including precautionary statements

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

2.2. OSHA regulatory status

This product is not considered hazardous material by the OSHA Communication Standard (29 CFR 1910.1200)

2.3. Potential health effects

Eyes:

Contact with eye will be irritating.

Skin:

Contact with skin may cause irritation, swelling or redness, allergic sensitization.

Inhalation:

Exposure to vapors (mist) will cause respiratory irritation and anesthesia.

Ingestion:

May cause injury of mouth, throat, and stomach.

Chronic Health Hazards:

Repeated skin contact may cause a persistent irritation or dermatitis.

Carcinogenicity:

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

See section 11 for more information.

2.4. Potential environmental effects

See section 12 for Ecological information.

3. Composition/Information on Ingredients

Composition	CAS No.	% By Weight	Classification HCS
Ethylene glycol	107-21-1	1 - 10	Acute Tox. 4: H302
Glycerol compound	C.B.I.	< 10	Not classified as hazardous
Water	7732-18-5	55 - 75	Not classified as hazardous

*C.B.I.: Confidential Business Information

Additional information: Chemical name and exact concentrations are being withheld as trade secrets.

4. First Aid Measures

4.1. First aid procedures

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

4.2. Note to physicians

May cause skin and eye irritation. Excessive inhalation of mist will cause respiratory irritation.

5. Fire Fighting Measures

5.1. Flammable properties:

Flash point: > 200 deg.F

5.2. Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

No data available

5.3. Protection of fire fighters

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

Flash Point: >200 deg.F

Protective equipment and precautions for firefighters

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus(SCBA).

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. Applying direct water may be dangerous because fire may expand to surroundings.

6. Accidental Release Measures

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

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 for containment

Dike spilled product.

6.4. Methods for Clean-up

Sweep up material and dispose as waste following local regulations.

6.5. Other information

No information

6.6. Spill or leak statements by type of chemical

Eliminate all ignition sources. Use appropriate personal protective equipment (PPE). Absorb and/or contain spill with inert sand, then place in suitable container. For large spills; use water spray to disperse vapors and dilute spill to a nonflammable mixture. Do not flush to sewer. Prevent run-off from entering drains, sewers or waterways.

7. Handling And Storage

7.1. 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.

7.2. Storage

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

8. Exposure Controls/Personal Protection

8.1. Exposure Guidelines

Occupational Exposure Limits:

US:

components	OSHA:PEL	ACGIH:TLV
Ethylene glycol (Aerosol only)	-	100mg/m ³ (ceiling)
Glycerol (mist)	15mg/m ³	10mg/m ³

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

components	PEL
Ethylene glycol (vapor)	40ppm, 100mg/m ³

8.2. Engineering controls:

Provide general and/or local exhaust ventilation.

8.3. Personal protective equipment (PPE)

Eye/face protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear safety glasses or chemical splash goggles.
Hand protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, use protective gloves. Recommended impervious gloves is butyl rubber glove.
Skin protection:	Not required under suitable use as setting the ink on the printer. However, in case of direct contact to the ink, wear protective clothing.
Respiratory protection:	In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory protection equipment. Use a half facepiece respirator (with goggles) or full face-piece respirator (without goggles) filtered with organic vapor cartridge. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self contained air supply. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General 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.

9. Physical and Chemical Properties

Appearance:	Clear liquid
Odor:	Slightly
pH:	9 - 10.5 at 77 deg.F
Boiling point:	No data available
Flash point:	> 200 deg.F
Flammability(solid,gas):	None
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	No data available
Relative density:	About 1.05 at 73.4 deg.F
Solubility:	No data available
Water Solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Viscosity:	No data available
Vapor density:	No data available
Evaporation rate:	No data available
Melting point:	No data available
Volatile organic compounds (VOC) content:	480 gram/liter (maximum value)

10. Stability and Reactivity

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

11. Toxicological Information

Acute toxicity:

Oral LD50	5000 or over [mg/kg] (Rat) (OECD TG 423)
Dermal LD50	No data available
Inhalant LC50	No data available

Skin corrosion/irritation:

≤ 1.5 (Rabbit) (OECD TG 404)

Serious eye damage/eye irritation:

Non-irritant (OECD TG 405)

Respiratory or skin sensitisation:

0% (OECD TG 429)

Germ cell mutagenicity:

Negative (by Ames Test)

Reproductive toxicity:

No data available

Carcinogenicity:

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

STOT-single exposure:

No data available.

STOT-repeated exposure:

No data available

Aspiration hazard:

No data available

12. Ecological Information

Ecotoxicity:

No data available

Persistence/Degradability:

No data available

Bioaccumulation/Accumulation:

No data available

Mobility in environment media:

No data available

Other adverse effects:

No data available

13. Disposal Considerations

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

DOT/ADR/ADG, IMDG, or IATA :

Not regulated

14.2. UN proper shipping name

DOT/ADR/ADG, IMDG, or IATA :

Not regulated

14.3. Transport hazard class(es)

DOT/ADR/ADG, IMDG, or IATA :

Not regulated

14.4. Packing group

DOT/ADR/ADG, IMDG, or IATA :

Not regulated

14.5. Environmental hazards

DOT/ADR/ADG, 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 MARPC

Not regulated
Not applicable

15. Regulatory Information

US Information:

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

California Proposition 65:

 **WARNING:** Reproductive Harm - www.P65Warnings.ca.gov.

SARA TITLE III:

Section 313:

Ethylene glycol

16. Other Information

NFPA 704: Hazard Rating System

Health - 1 , Flammable - 0 , Reactivity - 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

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.