

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

## 1. Product and Company Identification

**Product name:** S-PG-CY

**Use of the product:** Inkjet Printing

**Manufacturer:**

Manufacturer's name: Roland DGA Corporation  
Address: 15363 Barranca Parkway Irvine, CA 92618 U.S.A.  
Phone: +1-949-727-2100  
FAX: +1-949-727-2112  
E-mail:

**Emergency telephone:** +1-949-727-2100

**Date of issue:** Dec-6-2022

## 2. Hazard identification

### 2.1 Emergency Overview:

**Appearance and odor:** Cyan Liquid and Slightly odour

This product is not classified as hazardous according to GHS criteria

### GHS label elements, including precautionary statements

This product does not need to be labelled in according with GHS criteria.

### 2.2. OSHA regulatory status

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

### 2.3. Other hazards

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)
Others:	No information.

See section 11 for more information.

### 2.4. Potential environmental effects

See section 12 for Ecological information.

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

## 3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	% By Weight	Classification (HCS) Hazard Communication Standard
Colorant	CBI	1-10	Not classified as hazardous
2,2'-oxydiethanol	111-46-6	1-10	Acute Tox. 4: H302
Water	7732-18-5	90-100	Not classified as hazardous

## 4. First aid measures

### 4.1. First aid procedures

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

### 4.2. Note to physicians

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

## 5. Firefighting measures

### 5.1. Flammable properties:

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

Flash Point: > 201.2deg.F

### 5.2. Extinguishing media

Suitable extinguishing media: Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.

Unsuitable extinguishing media: Water, High-pressure water jet

### 5.3. 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.

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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

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## 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 non-flammable 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. Put protection wear that has electrical conductivity in case of work. 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:

Not available.

### 8.2. Engineering controls

Provide general and/or local exhaust ventilation.

### 8.3. Personal protective equipment (PPE)

#### Eye 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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

**Respiratory protection:**

In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory 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 odour
odor threshold:	Not defined
pH:	No data available
melting point/freezing point:	No data available
initial boiling point and boiling range:	No data available
flash point:	> 201.2deg.F
evaporation rate:	No data available
flammability (solid, gas):	Not applicable
vapor pressure:	No data available
vapor density:	No data available
specific gravity or relative density:	1.25-1.35
solubility in water:	soluble
partition coefficient: n-octanol/water:	No data available
auto-ignition temperature:	No data available
decomposition temperature:	No data available
volatile organic compounds (VOC) content:	120 g/L (Max)

## 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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

## 11. Toxicological information

**Acute toxicity:**

2,2'-oxydiethanol

LD50 (oral) : no data available, LD50 (dermal): no data available, LD50 (Inhal.): no data available

**Serious eye damage/eye irritation:**

no data available.

**Skin corrosion/irritation:**

no data available.

**Respiratory or skin sensitisation:**

no data available.

**Germ cell mutagenicity:**

no data available.

**Reproductive toxicity:**

no data available.

**Carcinogenicity:**

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

**Specific target organ toxicity - single exposure, (STOT-SE):**

no data available.

**Specific target organ toxicity - repeat exposure, (STOT-RE):**

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,

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

State/Provincial and Local regulations. Do not flush to surface water or sanitary sewer system.

## 14. Transport information

### 14.1 UN Class/UN Number

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

### 14.2 UN proper shipping name

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

### 14.3 Transport hazard class(es)

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

### 14.4 Packing group

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

### 14.5 Environmental hazards

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

### 14.6. Special precautions for user

ADR/ADG/DOT, IMDG, or IATA : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not regulated

## 15. Regulatory Information

### Federal Regulations

#### Toxic Substance Control Act (TSCA):

All components of this product are listed on the TSCA Inventory.

### SARA Title III Rules

#### Section 313/312 Hazard Classes

- |  |   |
|--|---|
| <input type="checkbox"/> Explosive                                       | <input type="checkbox"/> Acute toxicity (any route of exposure)                       |
| <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) | <input type="checkbox"/> Skin corrosion or irritation                                 |
| <input type="checkbox"/> Oxidizer (liquid, solid, or gas)                | <input type="checkbox"/> Serious eye damage or eye irritation                         |
| <input type="checkbox"/> Self-reactive                                   | <input type="checkbox"/> Respiratory or skin sensitization                            |
| <input type="checkbox"/> Pyrophoric (liquid or solid)                    | <input type="checkbox"/> Germ cell mutagenicity                                       |
| <input type="checkbox"/> Pyrophoric Gas                                  | <input type="checkbox"/> Carcinogenicity  |
| <input type="checkbox"/> Self-heating                                    | <input type="checkbox"/> Reproductive toxicity  |
| <input type="checkbox"/> Organic peroxide                                | <input type="checkbox"/> Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Corrosive to metal                              | <input type="checkbox"/> Aspiration hazard  |
| <input type="checkbox"/> Gas under pressure (compressed gas)             | <input type="checkbox"/> Simple Asphyxiant  |
| <input type="checkbox"/> In contact with water emits flammable gas       | <input type="checkbox"/> Hazard not otherwise classified                              |
| <input type="checkbox"/> Combustible Dust                                |   |
| <input type="checkbox"/> Hazard not otherwise classified                 |   |

#### Section 302 Extremely Hazardous Substances (EHS)

None of the ingredients are listed.

# Safety Data Sheet

Revision: US\_1.0

S-PG-CY

Revision Date: Dec-6-2022

**Section 313 Toxic Chemicals**

None of the ingredients are listed.

**CERCLA Hazardous Substances**

Not applicable

**RCRA (Hazardous waste code)**

None Assigned

**State Regulations****California Proposition 65:**

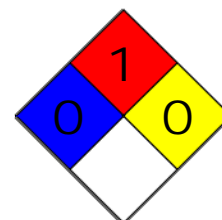
None of the ingredients are listed.

**16. Other information****NFPA Rating (NFPA 704):**

NFPA Health Hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Flammability: 1 - Must be preheated before ignition can occur.

NFPA Instability: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

## 1. Product and Company Identification

**Product name:** S-PG-MG**Use of the product:** Inkjet Printing**Manufacturer:**

Manufacturer's name: Roland DGA Corporation  
Address: 15363 Barranca Parkway Irvine, CA 92618 U.S.A.  
Phone: +1-949-727-2100  
FAX: +1-949-727-2112  
E-mail:

**Emergency telephone:** +1-949-727-2100**Date of issue:** Dec-6-2022

## 2. Hazard identification

### 2.1 Emergency Overview:

**Appearance and odor:** Magenta Liquid and Slightly odour

This product is not classified as hazardous according to GHS criteria

### GHS label elements, including precautionary statements

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

### 2.2. OSHA regulatory status

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

### 2.3. Other hazards

**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)
Others:	No information.

See section 11 for more information.

### 2.4. Potential environmental effects

See section 12 for Ecological information.



# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

## 3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	% By Weight	Classification (HCS) Hazard Communication Standard
2,2'-oxydiethanol	111-46-6	1-10	Acute Tox. 4: H302
Water	7732-18-5	90-100	Not classified as hazardous

## 4. First aid measures

### 4.1. First aid procedures

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

### 4.2. Note to physicians

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

## 5. Firefighting measures

### 5.1. Flammable properties:

Incombustible liquid under Hazard Communication Standard (HCS, U.S.A).  
Flash Point: > 201.2deg.F

### 5.2. Extinguishing media

Suitable extinguishing media: Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.  
Unsuitable extinguishing media: Water, High-pressure water jet

### 5.3. 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.

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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

## 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 non-flammable 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. Put protection wear that has electrical conductivity in case of work. 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:

Not available.

### 8.2. Engineering controls

Provide general and/or local exhaust ventilation.

### 8.3. Personal protective equipment (PPE)

#### Eye 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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

**Respiratory protection:**

In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory 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 odour
odor threshold:	Not defined
pH:	No data available
melting point/freezing point:	No data available
initial boiling point and boiling range:	No data available
flash point:	> 201.2deg.F
evaporation rate:	No data available
flammability (solid, gas):	Not applicable
vapor pressure:	No data available
vapor density:	No data available
specific gravity or relative density:	1.0-1.1
solubility in water:	soluble
partition coefficient: n-octanol/water:	No data available
auto-ignition temperature:	No data available
decomposition temperature:	No data available
volatile organic compounds (VOC) content:	120 g/L (Max)

## 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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

## 11. Toxicological information

**Acute toxicity:**

2,2'-oxydiethanol

LD50 (oral) : no data available, LD50 (dermal): no data available, LD50 (Inhal.): no data available

**Serious eye damage/eye irritation:**

no data available.

**Skin corrosion/irritation:**

no data available.

**Respiratory or skin sensitisation:**

no data available.

**Germ cell mutagenicity:**

no data available.

**Reproductive toxicity:**

no data available.

**Carcinogenicity:**

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

**Specific target organ toxicity - single exposure, (STOT-SE):**

no data available.

**Specific target organ toxicity - repeat exposure, (STOT-RE):**

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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

## 14. Transport information

### 14.1 UN Class/UN Number

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

### 14.2 UN proper shipping name

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

### 14.3 Transport hazard class(es)

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

### 14.4 Packing group

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

### 14.5 Environmental hazards

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

### 14.6. Special precautions for user

ADR/ADG/DOT, IMDG, or IATA : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not regulated

## 15. Regulatory Information

### Federal Regulations

#### Toxic Substance Control Act (TSCA):

All components of this product are listed on the TSCA Inventory.

### SARA Title III Rules

#### Section 313/312 Hazard Classes

- |  |   |
|--|---|
| <input type="checkbox"/> Explosive                                       | <input type="checkbox"/> Acute toxicity (any route of exposure)                       |
| <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) | <input type="checkbox"/> Skin corrosion or irritation                                 |
| <input type="checkbox"/> Oxidizer (liquid, solid, or gas)                | <input type="checkbox"/> Serious eye damage or eye irritation                         |
| <input type="checkbox"/> Self-reactive                                   | <input type="checkbox"/> Respiratory or skin sensitization                            |
| <input type="checkbox"/> Pyrophoric (liquid or solid)                    | <input type="checkbox"/> Germ cell mutagenicity                                       |
| <input type="checkbox"/> Pyrophoric Gas                                  | <input type="checkbox"/> Carcinogenicity  |
| <input type="checkbox"/> Self-heating                                    | <input type="checkbox"/> Reproductive toxicity  |
| <input type="checkbox"/> Organic peroxide                                | <input type="checkbox"/> Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Corrosive to metal                              | <input type="checkbox"/> Aspiration hazard  |
| <input type="checkbox"/> Gas under pressure (compressed gas)             | <input type="checkbox"/> Simple Asphyxiant  |
| <input type="checkbox"/> In contact with water emits flammable gas       | <input type="checkbox"/> Hazard not otherwise classified                              |
| <input type="checkbox"/> Combustible Dust                                |   |
| <input type="checkbox"/> Hazard not otherwise classified                 |   |

#### Section 302 Extremely Hazardous Substances (EHS)

None of the ingredients are listed.

#### Section 313 Toxic Chemicals

# Safety Data Sheet

Revision: US\_1.0

S-PG-MG

Revision Date: Dec-6-2022

None of the ingredients are listed.

**CERCLA Hazardous Substances**

Not applicable

**RCRA (Hazardous waste code)**

None Assigned

**State Regulations****California Proposition 65:**

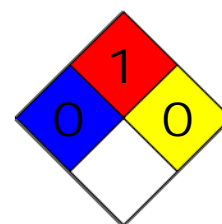
None of the ingredients are listed.

**16. Other information****NFPA Rating (NFPA 704):**

NFPA Health Hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Flammability: 1 - Must be preheated before ignition can occur.

NFPA Instability: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

## 1. Product and Company Identification

**Product name:** S-PG-YE**Use of the product:** Inkjet Printing**Manufacturer:**

Manufacturer's name: Roland DGA Corporation  
Address: 15363 Barranca Parkway Irvine, CA 92618 U.S.A.  
Phone: +1-949-727-2100  
FAX: +1-949-727-2112

E-mail:

**Emergency telephone:** +1-949-727-2100**Date of issue:** Dec-6-2022

## 2. Hazard identification

### 2.1 Emergency Overview:

**Appearance and odor:** Yellow Liquid and Slightly odour

This product is not classified as hazardous according to GHS criteria

### GHS label elements, including precautionary statements

This product does not need to be labelled in according with GHS criteria.

### 2.2. OSHA regulatory status

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

### 2.3. Other hazards

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)
Others:	No information.

See section 11 for more information.

### 2.4. Potential environmental effects

See section 12 for Ecological information.

# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

## 3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	% By Weight	Classification (HCS) Hazard Communication Standard
2,2'-oxydiethanol	111-46-6	1-10	Acute Tox. 4: H302
Water	7732-18-5	> 90	Not classified as hazardous

## 4. First aid measures

### 4.1. First aid procedures

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

### 4.2. Note to physicians

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

## 5. Firefighting measures

### 5.1. Flammable properties:

Incombustible liquid under Hazard Communication Standard (HCS, U.S.A).  
Flash Point: > 201.2deg.F

### 5.2. Extinguishing media

Suitable extinguishing media: Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.  
Unsuitable extinguishing media: Water, High-pressure water jet

### 5.3. 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.

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.



# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

## 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 non-flammable 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. Put protection wear that has electrical conductivity in case of work. 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:

Not available.

### 8.2. Engineering controls

Provide general and/or local exhaust ventilation.

### 8.3. Personal protective equipment (PPE)

#### Eye 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.

# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

**Respiratory protection:**

In case ventilation is insufficient, employee must use NIOSH approved air purifying respiratory 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 odour
odor threshold:	Not defined
pH:	No data available
melting point/freezing point:	No data available
initial boiling point and boiling range:	No data available
flash point:	> 201.2deg.F
evaporation rate:	No data available
flammability (solid, gas):	Not applicable
vapor pressure:	No data available
vapor density:	No data available
specific gravity or relative density:	1.0-1.1
solubility in water:	soluble
partition coefficient: n-octanol/water:	No data available
auto-ignition temperature:	No data available
decomposition temperature:	No data available
volatile organic compounds (VOC) content:	120 g/L (Max)

## 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.

# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

## 11. Toxicological information

**Acute toxicity:**

2,2'-oxydiethanol

LD50 (oral) : no data available, LD50 (dermal): no data available, LD50 (Inhal.): no data available

**Serious eye damage/eye irritation:**

no data available.

**Skin corrosion/irritation:**

no data available.

**Respiratory or skin sensitisation:**

no data available.

**Germ cell mutagenicity:**

no data available.

**Reproductive toxicity:**

no data available.

**Carcinogenicity:**

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

**Specific target organ toxicity - single exposure, (STOT-SE):**

no data available.

**Specific target organ toxicity - repeat exposure, (STOT-RE):**

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.

# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

## 14. Transport information

### 14.1 UN Class/UN Number

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

### 14.2 UN proper shipping name

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

### 14.3 Transport hazard class(es)

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

### 14.4 Packing group

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

### 14.5 Environmental hazards

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

### 14.6. Special precautions for user

ADR/ADG/DOT, IMDG, or IATA : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not regulated

## 15. Regulatory Information

### Federal Regulations

#### Toxic Substance Control Act (TSCA):

All components of this product are listed on the TSCA Inventory.

### SARA Title III Rules

#### Section 313/312 Hazard Classes

- |  |   |
|--|---|
| <input type="checkbox"/> Explosive                                       | <input type="checkbox"/> Acute toxicity (any route of exposure)                       |
| <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) | <input type="checkbox"/> Skin corrosion or irritation                                 |
| <input type="checkbox"/> Oxidizer (liquid, solid, or gas)                | <input type="checkbox"/> Serious eye damage or eye irritation                         |
| <input type="checkbox"/> Self-reactive                                   | <input type="checkbox"/> Respiratory or skin sensitization                            |
| <input type="checkbox"/> Pyrophoric (liquid or solid)                    | <input type="checkbox"/> Germ cell mutagenicity                                       |
| <input type="checkbox"/> Pyrophoric Gas                                  | <input type="checkbox"/> Carcinogenicity  |
| <input type="checkbox"/> Self-heating                                    | <input type="checkbox"/> Reproductive toxicity  |
| <input type="checkbox"/> Organic peroxide                                | <input type="checkbox"/> Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Corrosive to metal                              | <input type="checkbox"/> Aspiration hazard  |
| <input type="checkbox"/> Gas under pressure (compressed gas)             | <input type="checkbox"/> Simple Asphyxiant  |
| <input type="checkbox"/> In contact with water emits flammable gas       | <input type="checkbox"/> Hazard not otherwise classified                              |
| <input type="checkbox"/> Combustible Dust                                |   |
| <input type="checkbox"/> Hazard not otherwise classified                 |   |

#### Section 302 Extremely Hazardous Substances (EHS)

None of the ingredients are listed.

#### Section 313 Toxic Chemicals

# Safety Data Sheet

Revision: Version 1.0

S-PG-YE

Revision Date: Dec-6-2022

None of the ingredients are listed.

**CERCLA Hazardous Substances**

Not applicable

**RCRA (Hazardous waste code)**

None Assigned

**State Regulations****California Proposition 65:**

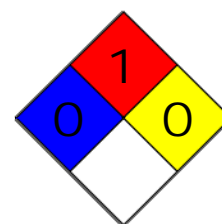
None of the ingredients are listed.

**16. Other information****NFPA Rating (NFPA 704):**

NFPA Health Hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Flammability: 1 - Must be preheated before ignition can occur.

NFPA Instability: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

## 1. Product and Company Identification

**Product name:** S-PG-BK**Use of the product:** Inkjet Printing**Manufacturer:**

Manufacturer's name:

Address: 15363 Barranca Parkway Irvine, CA 92618 U.S.A.

Phone: +1-949-727-2100

FAX: +1-949-727-2112

E-mail:

**Emergency telephone:** +1-949-727-2100**Date of issue:** Dec-6-2022

## 2. Hazard identification

### 2.1 Emergency Overview:

**Appearance and odor:** Black Liquid and slight odor

This product is not classified as hazardous according to GHS criteria

### GHS label elements, including precautionary statements

This product does not need to be labelled in according with GHS criteria.

### 2.2. OSHA regulatory status

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

### 2.3. Other hazards

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: This product contains Carbon black. IARC evaluated printing ink as a Group 3. (IARC Group 3: Not classifiable as to carcinogenicity to humans)

Others: No information.

See section 11 for more information.

### 2.4. Potential environmental effects

See section 12 for Ecological information.

# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

## 3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	% By Weight	Classification (HCS) Hazard Communication Standard
Carbon Black	1333-86-4	1-10	Not classified as hazardous
2,2'-oxydiethanol	111-46-6	1-10	Acute Tox. 4: H302
Water	7732-18-5	>90	Not classified as hazardous

## 4. First aid measures

### 4.1. First aid procedures

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

### 4.2. Note to physicians

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

## 5. Firefighting measures

### 5.1. Flammable properties:

Incombustible liquid under Hazard Communication Standard (HCS, U.S.A).  
Flash Point: > 201.2deg.F

### 5.2. Extinguishing media

Suitable extinguishing media: Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.  
Unsuitable extinguishing media: Water, High-pressure water jet

### 5.3. 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.

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:**

# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

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 non-flammable 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. Put protection wear that has electrical conductivity in case of work. 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:

Carbon Black (CAS 1333-86-4):

[NIOSH] REL: TWA 3.5 mg/m<sup>3</sup> TWA 0.1 mg/m<sup>3</sup>

[OSHA] PEL: TWA 3.5 mg/m<sup>3</sup>

### 8.2. Engineering controls

Provide general and/or local exhaust ventilation.

### 8.3. Personal protective equipment (PPE)

#### Eye 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



# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

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 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:	Black Liquid
odor:	slight odor
odor threshold:	Not defined
pH:	No data available
melting point/freezing point:	No data available
initial boiling point and boiling range:	No data available
flash point:	> 201.2deg.F
evaporation rate:	No data available
flammability (solid, gas):	Not applicable
vapor pressure:	No data available
vapor density:	No data available
specific gravity or relative density:	1.0-1.1
solubility in water:	Soluble
partition coefficient: n-octanol/water:	No data available
auto-ignition temperature:	No data available
decomposition temperature:	No data available
volatile organic compounds (VOC) content:	120 g/L

## 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:**

# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

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:

2,2'-oxydiethanol

LD50 (oral) : no data available, LD50 (dermal): no data available, LD50 (Inhal.): no data available

### Serious eye damage/eye irritation:

no data available.

### Skin corrosion/irritation:

no data available.

### Respiratory or skin sensitisation:

no data available.

### Germ cell mutagenicity:

no data available.

### Reproductive toxicity:

no data available.

### Carcinogenicity:

This product contains Carbon black.

IARC evaluated printing ink as a Group 3.

(IARC Group 3: Not t classifiable as to carcinogenicity to humans)

### Specific target organ toxicity - single exposure, (STOT-SE):

no data available.

### Specific target organ toxicity - repeat exposure, (STOT-RE):

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

# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

**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

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

### 14.2 UN proper shipping name

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

### 14.3 Transport hazard class(es)

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

### 14.4 Packing group

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

### 14.5 Environmental hazards

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

### 14.6. Special precautions for user

ADR/ADG/DOT, IMDG, or IATA : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not regulated

## 15. Regulatory Information

### Federal Regulations

#### Toxic Substance Control Act (TSCA):

All components of this product are listed on the TSCA Inventory.

### SARA Title III Rules

#### Section 313/312 Hazard Classes

- |  |   |
|--|---|
| <input type="checkbox"/> Explosive                                       | <input type="checkbox"/> Acute toxicity (any route of exposure)                       |
| <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) | <input type="checkbox"/> Skin corrosion or irritation                                 |
| <input type="checkbox"/> Oxidizer (liquid, solid, or gas)                | <input type="checkbox"/> Serious eye damage or eye irritation                         |
| <input type="checkbox"/> Self-reactive                                   | <input type="checkbox"/> Respiratory or skin sensitization                            |
| <input type="checkbox"/> Pyrophoric (liquid or solid)                    | <input type="checkbox"/> Germ cell mutagenicity                                       |
| <input type="checkbox"/> Pyrophoric Gas                                  | <input type="checkbox"/> Carcinogenicity  |
| <input type="checkbox"/> Self-heating                                    | <input type="checkbox"/> Reproductive toxicity  |
| <input type="checkbox"/> Organic peroxide                                | <input type="checkbox"/> Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Corrosive to metal                              | <input type="checkbox"/> Aspiration hazard  |

# Safety Data Sheet

Revision: US\_1.0

S-PG-BK

Revision Date: Dec-6-2022

- |  |  |
|--|--|
| <input type="checkbox"/> Gas under pressure (compressed gas)       | <input type="checkbox"/> Simple Asphyxiant               |
| <input type="checkbox"/> In contact with water emits flammable gas | <input type="checkbox"/> Hazard not otherwise classified |
| <input type="checkbox"/> Combustible Dust                          |  |
| <input type="checkbox"/> Hazard not otherwise classified           |  |

**Section 302 Extremely Hazardous Substances (EHS)**

None of the ingredients are listed.

**Section 313 Toxic Chemicals**

None of the ingredients are listed.

**CERCLA Hazardous Substances**

Not applicable

**RCRA (Hazardous waste code)**

None Assigned

**State Regulations****California Proposition 65:**

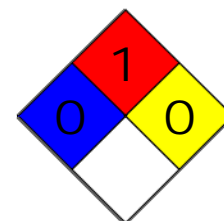
None of the ingredients are listed.

**16. Other information****NFPA Rating (NFPA 704):**

NFPA Health Hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Flammability: 1 - Must be preheated before ignition can occur.

NFPA Instability: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

## 1. Product and Company Identification

**Product name:** S-PG-WH

**Use of the product:** Inkjet Printing

**Manufacturer:**

Manufacturer's name: Roland DGA Corporation  
Address: 15363 Barranca Parkway Irvine, CA 92618 U.S.A.  
Phone: +1-949-727-2100  
FAX: +1-949-727-2112  
E-mail:

**Emergency telephone:** +1-949-727-2100

**Date of issue:** Dec-6-2022

## 2. Hazard identification

### 2.1 Emergency Overview:

**Appearance and odor:** White Liquid and Slightly odour

This product is not classified as hazardous according to GHS criteria

### GHS label elements, including precautionary statements

This product does not need to be labelled in according with GHS criteria.

### 2.2. OSHA regulatory status

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

### 2.3. Other hazards

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:	This product contains Titanium dioxide. IARC evaluated printing ink as a Group 3. (IARC Group 3: Not classifiable as to carcinogenicity to humans)
Others:	No information.

See section 11 for more information.

### 2.4. Potential environmental effects

See section 12 for Ecological information.

# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

## 3. Composition/information on ingredients

Chemical nature: mixture

Composition	CAS No.	% By Weight	Classification (HCS) Hazard Communication Standard
Titanium dioxide	13463-67-7	10-20	Not classified as hazardous
Aceton	67-64-1	<1	Flam. Liq. 2: H225 STOT SE 3: H336 Eye Irrit. 2: H319
Water	7732-18-5	80-100	Not classified as hazardous

## 4. First aid measures

### 4.1. First aid procedures

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

### 4.2. Note to physicians

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

## 5. Firefighting measures

### 5.1. Flammable properties:

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

Flash Point: > 201.2deg.F

### 5.2. Extinguishing media

Suitable extinguishing media: Dry chemical, Foam, Carbon dioxide, Dry sand, Loaded stream in spray.

Unsuitable extinguishing media: Water, High-pressure water jet

### 5.3. 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.

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.

# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

## 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 non-flammable 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. Put protection wear that has electrical conductivity in case of work. 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:

Titanium dioxide (CAS 13463-67-7):

[OSHA] PEL: TWA 15 mg/m<sup>3</sup>

[California Code of Regulations, Title 8] PEL 10 mg/m<sup>3</sup> (Total dust) 5 mg/m<sup>3</sup> (Respirable fraction)

Aceton (CAS 67-64-1):

[NIOSH] REL: TWA 250 ppm (590 mg/m<sup>3</sup>)

[OSHA] PEL: TWA 1000 ppm (2400 mg/m<sup>3</sup>)

[California Code of Regulations, Title 8] PEL 500ppm (1200mg/m<sup>3</sup>)

### 8.2. Engineering controls

Provide general and/or local exhaust ventilation.

### 8.3. Personal protective equipment (PPE)

# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

**Eye 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 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:	White Liquid
odor:	Slightly odour
odor threshold:	Not defined
pH:	No data available
melting point/freezing point:	No data available
initial boiling point and boiling range:	No data available
flash point:	> 201.2deg.F
evaporation rate:	No data available
flammability (solid, gas):	Not applicable
vapor pressure:	No data available
vapor density:	No data available
specific gravity or relative density:	1.1-1.2
solubility in water:	soluble
partition coefficient: n-octanol/water:	No data available
auto-ignition temperature:	No data available
decomposition temperature:	No data available
volatile organic compounds (VOC) content:	120 g_L

## 10. Stability and Reactivity

### 10.1 Reactivity:

No reactivity under normal temperature.

### 10.2. Possibility of hazardous reactions:

Not expected.



# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

**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:** None of the ingredients in this ink is classified as acute toxicant.**Serious eye damage/eye irritation:**

Causes serious eye irritation.

- Aceton

**Skin corrosion/irritation:**

no data available.

**Respiratory or skin sensitisation:**

no data available.

**Germ cell mutagenicity:**

no data available.

**Reproductive toxicity:**

no data available.

**Carcinogenicity:**

This product contains Titanium dioxide.

IARC evaluated printing ink as a Group 3.

(IARC Group 3: Not t classifiable as to carcinogenicity to humans)

**Specific target organ toxicity - single exposure, (STOT-SE):**

May cause drowsiness or dizziness.

- Aceton

**Specific target organ toxicity - repeat exposure, (STOT-RE):**

no data available.

**Aspiration hazard:**

no data available.

**12. Ecological information****Ecotoxicity:** No data available.

# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

**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

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

### 14.2 UN proper shipping name

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

### 14.3 Transport hazard class(es)

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

### 14.4 Packing group

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

### 14.5 Environmental hazards

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

### 14.6. Special precautions for user

ADR/ADG/DOT, IMDG, or IATA : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not regulated

## 15. Regulatory Information

### Federal Regulations

#### Toxic Substance Control Act (TSCA):

All components of this product are listed on the TSCA Inventory.

### SARA Title III Rules

#### Section 313/312 Hazard Classes

 Explosive Acute toxicity (any route of exposure)

# Safety Data Sheet

Revision: US\_1.0

S-PG-WH

Revision Date: Dec-6-2022

- |  |   |
|--|---|
| <input type="checkbox"/> Flammable (gases, aerosols, liquids, or solids) | <input type="checkbox"/> Skin corrosion or irritation                                 |
| <input type="checkbox"/> Oxidizer (liquid, solid, or gas)                | <input type="checkbox"/> Serious eye damage or eye irritation                         |
| <input type="checkbox"/> Self-reactive                                   | <input type="checkbox"/> Respiratory or skin sensitization                            |
| <input type="checkbox"/> Pyrophoric (liquid or solid)                    | <input type="checkbox"/> Germ cell mutagenicity                                       |
| <input type="checkbox"/> Pyrophoric Gas                                  | <input type="checkbox"/> Carcinogenicity  |
| <input type="checkbox"/> Self-heating                                    | <input type="checkbox"/> Reproductive toxicity  |
| <input type="checkbox"/> Organic peroxide                                | <input type="checkbox"/> Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Corrosive to metal                              | <input type="checkbox"/> Aspiration hazard  |
| <input type="checkbox"/> Gas under pressure (compressed gas)             | <input type="checkbox"/> Simple Asphyxiant  |
| <input type="checkbox"/> In contact with water emits flammable gas       | <input type="checkbox"/> Hazard not otherwise classified                              |
| <input type="checkbox"/> Combustible Dust                                |   |
| <input type="checkbox"/> Hazard not otherwise classified                 |   |

### Section 302 Extremely Hazardous Substances (EHS)

None of the ingredients are listed.

### Section 313 Toxic Chemicals

None of the ingredients are listed.

### CERCLA Hazardous Substances

Not applicable

### RCRA (Hazardous waste code)

None Assigned

### State Regulations

#### California Proposition 65:

None of the ingredients are listed.

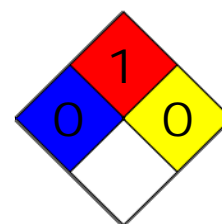
## 16. Other information

### NFPA Rating (NFPA 704):

NFPA Health Hazard: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA Flammability: 1 - Must be preheated before ignition can occur.

NFPA Instability: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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.