

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**1 SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifier
- Product name: Daylight Fluorescent ink Lemon yellow
- Product type/code: FD-607
- Registration number: No registration number is given yet for this product.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Used towriting mark inks.  
Use advised against: No information available.
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
P gqp'Qtlgpv'\*Uj cpi j ck'E q0'Nf 0  
Address: "Tqqo '738'6'73: . 'P q07: 5. 'Npi npi 'Tqcf 0'Qhuj qtg'Qkl'O cpukp+'Uj cpi j ck'ROTOEj kpc"  
Postcode: "422252  
Tel: "- \*: 8+"43/86862: 9:

**2 SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008 [CLP]  
The product is not classified according to the CLP regulation.
- Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]  
The product is not classified as dangerous.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 [CLP] Void
- Hazard pictogram(s): Void
- Signal word: Void
- Hazard statement(s): Void
- Precautionary statements: Void
- 2.3 Other hazards No information available.
- Results of PBT and vPvB assessment: Not applicable.

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- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	70.0-90.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
Solvent Green 7	6358-69-6		1.0-4.0%
2,2',2"-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

- General information: In all cases of doubt, or when symptoms persist, seek medical attention.
- Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

- Following skin contact: Immediately wash with water and soap and rinse thoroughly.
- Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.- Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately.- Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

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### 5 SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

· Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.

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

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon

dioxide Other irritating and toxic gases.

#### · 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting w from entering surface water or groundwater.

### 6 SECTION 6: Accidental release measures

#### · 6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ig Evacuate personnel to safe areas.

#### · 6.2 Environmental precautions

Do not allow material to be released into the soil, sewerage systems and surface water.

Inform respective authorities in case of seepage into water course or sewage system.

#### · 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 SECTION 7: Handling and storage

#### · 7.1 Handling

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Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEEL (USA)	10 mg/m <sup>3</sup>
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56-81-5 glycerol

PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist

102-71-6 2,2',2"-nitrilotriethanol

TLV (USA)	5 mg/m <sup>3</sup>
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- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.

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The work area set safety shower and eyewash equipment.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· **Skin protection:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Colour: Lemon yellow

· Odour: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not applicable.

· Auto-Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density: Not determined.

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· Solubility in/Miscibility with:

Water: The product is aqueous solution.

· Partition coefficient (n-octanol/water): Not determined.

· 9.2 Additional information No further relevant information available.

**10 SECTION 10: Stability and reactivity**

- 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.
- 10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide  
Other irritating and toxic gases.

**11 SECTION 11: Toxicological information**

· Acute toxicity: No data available.

· LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
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- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: No irritating effect.
- Respiratory or skin sensitization: No sensitizing effects known.

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- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatitata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.

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· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	6358-69-6	39464-66-9	102-71-6
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US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed
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Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed
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Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed
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Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed
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China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed
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· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.



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· Training hints: Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.

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Version number 1

Revision date 01.15.2018

**1 SECTION 1: Identification of the substance/mixture and of the company/undertaking**

## · 1.1 Product identifier

· Product name: Daylight Fluorescent ink Green

· Product type/code: FD-607

· Registration number: No registration number is given yet for this product.

## · 1.2 Relevant identified uses of the substance or mixture and uses advised

against Identified uses: Used to writing mark inks.

Use advised against: No information available.

## · 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

P gqp'Qt lgpv'\*Uj cpi j ck'E q0'Nf 0

Address: "Tqqo '738'6'73: . 'P q07: 5. 'Nlpi npi 'Tqcf 0' Qhuj qtg' Qk' O cpukqp+ 'Uj cpi j ck' R0T0Ej kpc"

Postcode: "422252

Tel: "- \*: 8+43/86862: 9:

**2 SECTION 2: Hazards identification**

## · 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008 [CLP]

The product is not classified according to the CLP regulation.

· Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]

The product is not classified as dangerous.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature

## · 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 [CLP] Void

· Hazard pictogram(s): Void

· Signal word: Void

· Hazard statement(s): Void

· Precautionary statements: Void

## · 2.3 Other hazards No information available.

· Results of PBT and vPvB assessment: Not applicable.

**Safety Data Sheet (SDS)**

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- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	70.0-90.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
Solvent Green 7	6358-69-6		1.0-4.0%
Direct Blue 86	1330-38-7		1.0-4.0%
2,2',2''-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

- General information: In all cases of doubt, or when symptoms persist, seek medical attention.
- Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

- Following skin contact: Immediately wash with water and soap and rinse thoroughly.
- Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.- Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately.- Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

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**5 SECTION 5: Firefighting measures**

## · 5.1 Extinguishing media

· Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.

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

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon dioxide  
Other irritating and toxic gases.

## · 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting from entering surface water or groundwater.

**6 SECTION 6: Accidental release measures**

## · 6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

## · 6.2 Environmental precautions

Do not allow material to be released into the soil, sewerage systems and surface water.

Inform respective authorities in case of seepage into water course or sewage system.

## · 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

## · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 SECTION 7: Handling and storage**

## · 7.1 Handling

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Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEEL (USA)	10 mg/m <sup>3</sup>
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56-81-5 glycerol

PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist

102-71-6 2,2',2"-nitrilotriethanol

TLV (USA)	5 mg/m <sup>3</sup>
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- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.

The work area set safety shower and eyewash equipment.

**Safety Data Sheet (SDS)**

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- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

- **Skin protection:**



Protective gloves

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye and face protection:



Tightly sealed goggles

- Body protection: Protective work clothing

**9 SECTION 9: Physical and chemical properties**

- 9.1 Information on basic physical and chemical properties

- Appearance:

Form: Liquid

Colour: Green

- Odour: Not determined.

- pH-value: Not determined.

- Melting point/Melting range: Not determined.

- Boiling point/Boiling range: Not determined.

- Flash point: Not determined.

- Flammability (solid, gaseous): Not applicable.

- Auto-Ignition temperature: Not determined.

- Decomposition temperature: Not determined.

- Self-igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- Vapour pressure: Not determined.

- Density: Not determined.

# Safety Data Sheet (SDS)

According to Commission Regulation (EU) No 453/2010

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Revision date 01.15.2018

· Solubility in/Miscibility with:

Water: The product is aqueous solution.

· Partition coefficient (n-octanol/water): Not determined.

· 9.2 Additional information No further relevant information available.

## 10 SECTION 10: Stability and reactivity

· 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).

· 10.2 Chemical stability Stable under normal conditions of use, storage and transport.

· 10.3 Possibility of hazardous reactions No dangerous reactions known.

· 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.

· 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.

· 10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

Other irritating and toxic gases.

## 11 SECTION 11: Toxicological information

· Acute toxicity: No data available.

· LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
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· Skin corrosion/irritation: No irritant effect.

· Serious eye damage/irritation: No irritating effect.

· Respiratory or skin sensitization: No sensitizing effects known.

**Safety Data Sheet (SDS)**

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- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatinata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.



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· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	6358-69-6	1330-38-7	39464-66-9	102-71-6
US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed	Listed

· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.

· Training hints: Provide adequate information, instruction and training for operators.

## Safety Data Sheet (SDS)

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· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**1 SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifier
  - Product name: Daylight Fluorescent ink Pink
  - Product type/code: FP
  - Registration number: No registration number is given yet for this product.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Used to writing mark inks.  
Use advised against: No information available.
- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:  
Neon Orient (Shanghai) Co., Ltd.  
Address: Room 516 – 518, No. 583, Lingling Road. (Offshore Oil Mansion) Shanghai, P.R. China  
Postcode: 200030  
Tel: +(86) 21-64640878

**2 SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008 [CLP]  
The product is not classified according to the CLP regulation.
  - Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]  
The product is not classified as dangerous.
  - Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008 [CLP] Void
  - Hazard pictogram(s): Void
  - Signal word: Void
  - Hazard statement(s): Void
  - Precautionary statements: Void
- 2.3 Other hazards No information available.
- Results of PBT and vPvB assessment: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	40.0-60.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
Fluorescent Pigment-pink	58969-01-0		0.05-2.0%
Thermoplastic acrylic resin	25767-39-9		20.0-30.0%
2,2',2"-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

- General information: In all cases of doubt, or when symptoms persist, seek medical attention.
- Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

- Following skin contact: Immediately wash with water and soap and rinse thoroughly.
- Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately.

- Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**5 SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon dioxide  
Other irritating and toxic gases.

- 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting w from entering surface water or groundwater.

**6 SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of  
ig Evacuate personnel to safe areas.

- 6.2 Environmental precautions

Do not allow material to be released into the soil, sewerage systems and surface water.

Inform respective authorities in case of seepage into water course or sewage system.

- 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

- 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 SECTION 7: Handling and storage**

- 7.1 Handling

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEEL (USA)	10 mg/m <sup>3</sup>
56-81-5 glycerol	
PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist
102-71-6 2,2',2"-nitrilotriethanol	
TLV (USA)	5 mg/m <sup>3</sup>

- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

The work area set safety shower and eyewash equipment.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· **Skin protection:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Colour: Pink

· Odour: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not applicable.

· Auto-Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density: Not determined.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Solubility in/Miscibility with:

Water: The product is aqueous solution.

· Partition coefficient (n-octanol/water): Not determined.

· 9.2 Additional information No further relevant information available.

**10 SECTION 10: Stability and reactivity**

- 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.
- 10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide  
Other irritating and toxic gases.

**11 SECTION 11: Toxicological information**

· Acute toxicity: No data available.

· LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
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- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: No irritating effect.
- Respiratory or skin sensitization: No sensitizing effects known.



**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatinata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	58969-01-0	25767-39-9	39464-66-9	102-71-6
US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed	Listed

· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Training hints: Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**1 SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifier
- Product name: Daylight Fluorescent ink Orange
- Product type/code: FP
- Registration number: No registration number is given yet for this product.
  
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Used to writing mark inks.  
Use advised against: No information available.
  
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
Neon Orient (Shanghai) Co., Ltd.  
Address: Room 516 – 518, No. 583, Lingling Road. (Offshore Oil Mansion) Shanghai, P.R. China  
Postcode: 200030  
Tel: +(86) 21-64640878

**2 SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008 [CLP]  
The product is not classified according to the CLP regulation.
- Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]  
The product is not classified as dangerous.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature
  
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 [CLP] Void
- Hazard pictogram(s): Void
- Signal word: Void
- Hazard statement(s): Void
- Precautionary statements: Void
- 2.3 Other hazards No information available.
- Results of PBT and vPvB assessment: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	40.0-60.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
Fluorescent Pigment-Orange	3520-72-7		1.0-4.0%
Thermoplastic acrylic resin	25767-39-9		20.0-30.0%
2,2',2"-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

· General information: In all cases of doubt, or when symptoms persist, seek medical attention. · Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

· Following skin contact: Immediately wash with water and soap and rinse thoroughly. · Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately. · Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**5 SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon dioxide  
Other irritating and toxic gases.

- 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting w from entering surface water or groundwater.

**6 SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures  
Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ig Evacuate personnel to safe areas.
- 6.2 Environmental precautions  
  
Do not allow material to be released into the soil, sewerage systems and surface water.  
Inform respective authorities in case of seepage into water course or sewage system.
- 6.3 Methods and material for containment and cleaning up  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.
- 6.4 Reference to other sections  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 SECTION 7: Handling and storage**

- 7.1 Handling

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEEL (USA)	10 mg/m <sup>3</sup>
56-81-5 glycerol	
PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist
102-71-6 2,2',2"-nitrilotriethanol	
TLV (USA)	5 mg/m <sup>3</sup>

- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

The work area set safety shower and eyewash equipment.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· **Skin protection:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Colour: Orange

· Odour: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not applicable.

· Auto-Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density: Not determined.



**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Solubility in/Miscibility with:

Water:

The product is aqueous solution.

· Partition coefficient (n-octanol/water): Not determined.

· 9.2 Additional information

No further relevant information available.

**10 SECTION 10: Stability and reactivity**

- 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.
- 10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide  
Other irritating and toxic gases.

**11 SECTION 11: Toxicological information**

· Acute toxicity: No data available.

· LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
------	------	-------------------

- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: No irritating effect.
- Respiratory or skin sensitization: No sensitizing effects known.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatinata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user: Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	3520-72-7	25767-39-9	39464-66-9	102-71-6
US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed	Listed

· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.

## Safety Data Sheet (SDS)

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 09.25.2015

· Training hints: Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.

## Safety Data Sheet (SDS)

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

### 1 SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
  - Product name: Daylight Fluorescent ink Blue
  - Product type/code: FD-607
  - Registration number: No registration number is given yet for this product.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Used to writing mark inks.  
Use advised against: No information available.
- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:  
P gqp'Qtlgpv'\*Uj cpi j ck'E q0'Nf 0
  - Address: "Tqqo '738'6'73: . 'P q07: 5. 'Npi npi 'Tqcf 0' Qhuj qtg' Qkl' O cpukp+ 'Uj cpi j ck' R0T0Ej kpc"
  - Postcode: "422252
  - Tel: "- \*: 8+43/86862: 9:

### 2 SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008 [CLP]  
The product is not classified according to the CLP regulation.
  - Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]  
The product is not classified as dangerous.
  - Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008 [CLP] Void
  - Hazard pictogram(s): Void
  - Signal word: Void
  - Hazard statement(s): Void
  - Precautionary statements: Void
- 2.3 Other hazards No information available.
- Results of PBT and vPvB assessment: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	70.0-90.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
C.I. Acid Blue 9	2650-18-2	220-168-0	1.0-4.0%
2,2',2"-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

· General information: In all cases of doubt, or when symptoms persist, seek medical attention. · Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

· Following skin contact: Immediately wash with water and soap and rinse thoroughly. · Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately. · Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**5 SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon dioxide  
Other irritating and toxic gases.

- 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting from entering surface water or groundwater.

**6 SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures  
Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of fire. Evacuate personnel to safe areas.
- 6.2 Environmental precautions  
  
Do not allow material to be released into the soil, sewerage systems and surface water.  
Inform respective authorities in case of seepage into water course or sewage system.
- 6.3 Methods and material for containment and cleaning up  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.
- 6.4 Reference to other sections  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 SECTION 7: Handling and storage**

- 7.1 Handling

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEEL (USA)	10 mg/m <sup>3</sup>
56-81-5 glycerol	
PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist
102-71-6 2,2',2"-nitrilotriethanol	
TLV (USA)	5 mg/m <sup>3</sup>

- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.



**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

The work area set safety shower and eyewash equipment.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· **Skin protection:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Colour: Blue

· Odour: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not applicable.

· Auto-Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density: Not determined.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Solubility in/Miscibility with:

Water:

The product is aqueous solution.

· Partition coefficient (n-octanol/water): Not determined.

· 9.2 Additional information

No further relevant information available.

**10 SECTION 10: Stability and reactivity**

- 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.
- 10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide  
Other irritating and toxic gases.

**11 SECTION 11: Toxicological information**

· Acute toxicity: No data available.

· LD/LC50 values relevant for classification:

57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
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- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: No irritating effect.
- Respiratory or skin sensitization: No sensitizing effects known.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatinata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	2650-18-2	39464-66-9	102-71-6
US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed
Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed
Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed
Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed
China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed

· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.

## Safety Data Sheet (SDS)

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Training hints: Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**1 SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifier
  - Product name: Daylight Fluorescent ink Violet
  - Product type/code: FD-607
  - Registration number: No registration number is given yet for this product.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses: Used to writing mark inks.  
Use advised against: No information available.
- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:  
Neon Orient (Shanghai) Co., Ltd.  
Address: Room 516 – 518, No. 583, Lingling Road. (Offshore Oil Mansion) Shanghai, P.R. China  
Postcode: 200030  
Tel: +(86) 21-64640878

**2 SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008 [CLP]  
The product is not classified according to the CLP regulation.
  - Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]  
The product is not classified as dangerous.
  - Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008 [CLP] Void
  - Hazard pictogram(s): Void
  - Signal word: Void
  - Hazard statement(s): Void
  - Precautionary statements: Void
- 2.3 Other hazards No information available.
- Results of PBT and vPvB assessment: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- PBT: Not applicable.
- vPvB: Not applicable.

**3 SECTION 3: Composition/information on ingredients**

- 3.1 Chemical characterization: Mixtures

- Description:

Product: consisting of the following components.

Ingredient	CAS No.	EC No.	Concentration
water	7732-18-5	231-791-2	70.0-90.0%
propane-1,2-dio	57-55-6	200-338-0	10.0-25.0%
glycerol	56-81-5	200-289-5	10.0-20.0%
C.I. Acid Blue 9	2650-18-2	220-168-0	1.0-4.0%
C.I. Acid Red 52	3520-42-1	222-529-8	1.0-4.0%
2,2',2"-nitrilotriethanol	102-71-6	203-049-8	< 1.0%
Surfactant	39464-66-9	--	0.1-0.5%

- Dangerous components: Void

**4 SECTION 4: First aid measures**

- 4.1 Description of first aid measures

- General information: In all cases of doubt, or when symptoms persist, seek medical attention.
- Following inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulties continue.

- Following skin contact: Immediately wash with water and soap and rinse thoroughly.
- Following eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.- Following ingestion:

Never give anything through mouth to an unconscious person. Get medical attention immediately.- Information for doctor: Symptomatic treatment is advised.

- 4.2 Most important symptoms and effects, both acute and delayed No information available.

- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

**5 SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO<sub>2</sub>, dry chemical powder, water spray.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO), Carbon dioxide  
Other irritating and toxic gases.

- 5.3 Advice for firefighters

Fire-fighters should wear appropriate breathing apparatus and protective equipment. Prevent fire-fighting w from entering surface water or groundwater.

**6 SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of  
ig Evacuate personnel to safe areas.

- 6.2 Environmental precautions

Do not allow material to be released into the soil, sewerage systems and surface water.  
Inform respective authorities in case of seepage into water course or sewage system.

- 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.

- 6.4 Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 SECTION 7: Handling and storage**

- 7.1 Handling



**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

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Revision date 01.15.2018

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

- Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Keep away from heat and ignition sources. Store away from incompatible materials.

- 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8 SECTION 8: Exposure controls/personal protection**

- Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:	
57-55-6 propane-1,2-diol	
WEEL (USA)	10 mg/m <sup>3</sup>
56-81-5 glycerol	
PEL (USA)	15* 5** mg/m <sup>3</sup>
	*total dust **respirable fraction
TLV (USA)	10* ppm
	*Mist
102-71-6 2,2',2"-nitrilotriethanol	
TLV (USA)	5 mg/m <sup>3</sup>

- DNELs No information available.
- PNECs No information available.

- 8.2 Exposure controls

- Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Provide local exhaust or process enclosure ventilation system.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

The work area set safety shower and eyewash equipment.

· Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

· **Skin protection:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Colour: Violet

· Odour: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not determined.

· Flash point: Not determined.

· Flammability (solid, gaseous): Not applicable.

· Auto-Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure: Not determined.

· Density: Not determined.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

## · Solubility in/Miscibility with:

Water: The product is aqueous solution.

## · Partition coefficient (n-octanol/water): Not determined.

## · 9.2 Additional information No further relevant information available.

**10 SECTION 10: Stability and reactivity**

- 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- 10.5 Incompatible materials Strong acids, strong bases or strong oxidizing agents.
- 10.6 Hazardous decomposition products  
Carbon monoxide and carbon dioxide  
Other irritating and toxic gases.

**11 SECTION 11: Toxicological information**

- Acute toxicity: No data available.

## · LD/LC50 values relevant for classification:

## 57-55-6 propane-1,2-diol

Oral	LD50	20000 mg/kg (rat)
Dermal	LD50	20800 mg/kg (rabbit)

## 102-71-6 2,2',2''-nitrilotriethanol

Oral	LD50	4920 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

## 56-81-5 glycerol

Oral	LD50	12600 mg/kg (rat)
------	------	-------------------

- Skin corrosion/irritation: No irritant effect.
- Serious eye damage/irritation: No irritating effect.
- Respiratory or skin sensitization: No sensitizing effects known.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

- Specific target organ system toxicity: No information available.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): No information available.

**12 SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

57-55-6 propane-1,2-diol

EC50 - Crustacea 19000 mg/L/96 h mg/L/48h (Pseudokirchneriella Subcatinata) 34400

mg/L/48 h mg/L/48h (Daphnia magna)

51600 mg/L/96 h mg/L/48h (Onchorhynchus mykiss)

## · 12.2 Persistence and degradability No further relevant information available.

## · 12.3 Bioaccumulative potential No further relevant information available.

## · 12.4 Mobility in soil No further relevant information available.

## · 12.5 Results of PBT and vPvB assessment

## · PBT: Not applicable.

## · vPvB: Not applicable.

## · 12.6 Other adverse effects No information available.

**13 SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

## · Recommendation: Disposal must be made according to official regulations.

**14 SECTION 14: Transport information**

## · 14.1 Land transport

## · ADR/RID class: Not regulated.

## · UN-Number:

## · 14.2 Maritime transport

## · IMDG Class: Not regulated.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· UN Number: Not applicable.

· Marine pollutant: No

· 14.3 Air transport

· ICAO/IATA Class: Not regulated.

· UN/ID Number: Not applicable.

· 14.4 Environmental hazards: Not applicable.

· 14.5 Special precautions for user Not applicable.

· 14.6 Transport/Additional information: Not dangerous according to the above specifications.

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

**15 SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation:

Authorisations: No information available.

Restrictions on use: No information available.

Regulatory information:

CAS No.	7732-18-5	57-55-6	56-81-5	2650-18-2	3520-42-1	39464-66-9	102-71-6
US-TSCA	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Canada-DSL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Australia-AICS	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Korea-ECL	Listed	Listed	Listed	Listed	Listed	Listed	Listed
China-IECSC	Listed	Listed	Listed	Listed	Listed	Listed	Listed

· 15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

**16 SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases: Not applicable.

**Safety Data Sheet (SDS)**

According to Commission Regulation (EU) No 453/2010

Printing date 01.15.2018

Version number 1

Revision date 01.15.2018

· Training hints: Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

AICS: Australian Inventory of Chemical Substances

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

ENCS: Japanese Existing and New Chemical Substances List

ECL: Korean Existing Chemicals List

IECSC: Chinese Inventory of Existing Chemical Substances

TSCA: American Toxic Substances Control Act

EINECS: European Inventory of Existing Commercial Chemical Substances

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

· Sources:

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

HSDB: Hazardous Substances Data Bank.

ESIS: European chemical Substances Information System.