1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Color Philosophy Permanent Ink
#596781,596804,596835,599607,59961
4,599638,599645,599652

Product Name

Other means of identification

Synonyms
None

Recommended use of the chemical and restrictions on use

Recommended Use
Professional Use Only

Uses advised against
No information available

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Acute toxicity - Oral Category 4
Serious eye damage/eye irritation Category 2
Specific target organ toxicity (repeated exposure) Category 2

GHS Label elements, including precautionary statements

Emergency Overview

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td></td>
</tr>
<tr>
<td>Harmful if swallowed</td>
<td></td>
</tr>
<tr>
<td>Causes serious eye irritation</td>
<td></td>
</tr>
<tr>
<td>May cause damage to organs through prolonged or repeated exposure</td>
<td></td>
</tr>
</tbody>
</table>

Appearance  Color  Physical State  Liquid  Odor  Faint hydrocarbon

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear eye/face protection

Precautionary Statements - Response
Get medical advice/attention if you feel unwell

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
None

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Unknown Toxicity
20% of the mixture consists of ingredient(s) of unknown toxicity
Other information

May be harmful in contact with skin

Interactions with Other Chemicals
No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>30 - 60</td>
<td>*</td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td>111-46-6</td>
<td>15 - 40</td>
<td>*</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>10 - 30</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice**
Show this safety data sheet to the doctor in attendance.

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Skin Contact**
Wash with soap and water.

**Inhalation**
Remove to fresh air.

**Ingestion**
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Most important symptoms and effects, both acute and delayed**

Most Important Symptoms and Effects
Burning sensation.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
No information available.

Uniform Fire Code
- Irritant: Liquid
- Combustible Liquid: III-B

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact: No.
Sensitivity to Static Discharge: No.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas.

Other Information
Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Environmental Precautions
Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Incompatible Products
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>TWA: 10 ppm inhalable fraction and vapor</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection
Wear protective gloves and protective clothing.

Respiratory Protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.
# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Various Colors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Faint hydrocarbon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>UNKNOWN</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>250 °C / 300 °F</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 250 °F</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.0 – 1.3</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Partly soluble</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation
Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye Contact
Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. May cause redness, itching, and pain. May cause temporary eye irritation.

Skin Contact
Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion
Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed. (based on components).

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50 (mg/kg)</th>
<th>Dermal LD50 (mg/kg)</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>3384 (Rat)</td>
<td>2700 (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>112-34-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td>12565 (Rat)</td>
<td>11890 (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>111-46-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>&gt; 10000 (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Information on toxicological effects

Symptoms
May cause redness and tearing of the eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
No information available.

Mutagenic Effects
No information available.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains titanium dioxide which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is a liquid.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>Group 2B</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive Toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE).

Chronic Toxicity
Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects.

Target Organ Effects

Aspiration Hazard
No information available.

Numerical measures of toxicity  Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
1,091.00 mg/kg

ATEmix (dermal)
4,768.00 mg/kg (ATE)
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether 112-34-5</td>
<td>96h EC50: &gt; 100 mg/L (Desmodesmus subspicatus)</td>
<td>96h LC50: = 1300 mg/L (Lepomis macrochirus)</td>
<td>24h EC50: = 2850 mg/L 48h EC50: &gt; 100 mg/L</td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol 111-46-6</td>
<td>96h LC50: = 75200 mg/L (Pimephales promelas)</td>
<td>EC50 = 29228 mg/L 15 min</td>
<td>48h EC50: = 84000 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available.

Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol 111-46-6</td>
<td>-1.98</td>
</tr>
</tbody>
</table>

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of contents/containers in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT REGULATED</td>
<td>N/A</td>
</tr>
</tbody>
</table>

TDG
Not regulated

MEX
Not regulated

ICAO
Not regulated
15. REGULATORY INFORMATION

International Inventories

TSCA 
Complies

DSL 
All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether - 112-34-5</td>
<td>112-34-5</td>
<td>30 - 60</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
</tr>
<tr>
<td>Fire Hazard</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
</tr>
<tr>
<td>Reactive Hazard</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide - 13463-67-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>
U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>112-34-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111-46-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

International Regulations

Mexico
National occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td>Mexico: TWA= 10 mg/m³</td>
</tr>
<tr>
<td>13463-67-7 (10-30)</td>
<td></td>
<td>Mexico: STEL= 20 mg/m³</td>
</tr>
</tbody>
</table>

Canada
WHMIS Hazard Class
D2B - Toxic materials

16. OTHER INFORMATION

NFPA
Health Hazards 2  Flammability 1  Instability 0

HMIS
Health Hazards 2 *  Flammability 1  Physical Hazard 0

Chronic Hazard Star Legend  * = Chronic Health Hazard

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date
31-May-2017

Revision Note
Updated version

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. While the information is believed to be accurate, Pro ColorFlex Ink Corporation makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Pro ColorFlex Ink Corporation’s control and therefore users are responsible to verify this data under their own operating conditions to determine if the product is suitable for their particular purposes, and they assume all risks of their use, safe handling, processing, storage, transportation, disposal and release of the product.

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.

End of Safety Data Sheet