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

Product name: K-Series(Kodak) DTF Black Ink

Product code: DTF-Black-500-K

Synonyms: 7494776

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: ink or inkjet chemical

Supplier: ColDesi / Colman & Company, Inc., 3634 131st Ave N., Clearwater, FL 33762
Phone: 800-891-1094.

IN EMERGENCY, call CHEMTREC, in US or Canada, call 800-424-9300
Outside of US or Canada, call 703-527-3887

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Hazard category</th>
<th>Route of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not hazardous according to GHS/Hazard Communication regulations.</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

GHS-Labelling

Contains:
Components either non-hazardous or below regulatory thresholds (proprietary)

Hazard statements: Not hazardous according to GHS/Hazard Communication regulations.

HMIS IV Hazard Ratings: Health - 0, Flammability - 0, Physical Hazard - 0

NFPA Hazard Ratings: Health - 0, Flammability - 0, Instability - 0

NOTE: HMIS IV and NFPA 704 (2007) hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components - (CAS-No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 15</td>
<td>Glycerol (56-81-5)</td>
</tr>
<tr>
<td>1 - 5</td>
<td>Carbon black (1333-86-4)</td>
</tr>
</tbody>
</table>

4. First aid measures

**Inhalation:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Eyes:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lens, if worn. Get medical attention if symptoms persist.

**Skin:** Wash off immediately with soap and plenty of water. Get medical attention if symptoms occur.

**Ingestion:** If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur.

**Most important symptoms and effects, both acute and delayed:** This product is not expected to cause any health or safety hazards, when used as intended.

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

**Treatment:** No information available.

5. Firefighting measures

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

**Special hazards arising from the substance or mixture**

**Hazardous Combustion Products:** Carbon oxides

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective suit. Fire or excessive heat may produce hazardous decomposition products.

**Unusual Fire and Explosion Hazards:** None.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Refer to protective measures listed in sections 7 and 8.
Methods and materials for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Environmental precautions: Prevent runoff from entering drains, sewers, or streams.

For Large Spills: Prevent runoff from entering drains, sewers, or streams.

7. Handling and storage

Precautions for safe handling

Personal precautions: No special precautionary measures should be needed under anticipated conditions of use. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

Ventilation: Match ventilation rates to conditions of use so as not to exceed any applicable exposure limits (see Section 8).

Conditions for safe storage, including any incompatibilities: Keep in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Regulatory List</th>
<th>Value Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>OSHA</td>
<td>Time weighted average</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form of exposure: mist, respirable fraction</td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>OSHA</td>
<td>Time weighted average</td>
<td>15 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form of exposure: mist, total particulate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>Time weighted average</td>
<td>10 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form of exposure: total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: mist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>Time weighted average</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form of exposure: respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remarks: mist</td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>ACGIH</td>
<td>Time weighted average</td>
<td>3 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Form of exposure: inhalable particulate matter</td>
<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Time weighted average</td>
<td>3.5 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>
Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields (or goggles).

Hand protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

9. Physical and chemical properties

Physical form: liquid

Colour: black

Odour: mild

Specific gravity: No data available - testing not performed

Vapour pressure: No data available - testing not performed

Vapour density: No data available - testing not performed

Boiling point/boiling range: 95 - 110 °C (203.0 - 230.0 °F)

Water solubility: partly soluble

pH: 7 - 10

Flash point: > 130 °C (266.0 °F)

Evaporation rate: No data available - testing not performed

Flammability (Solid; gas): No data available - testing not performed

Upper explosion limit: No data available - testing not performed
Lower explosion limit: No data available - testing not performed

Partition coefficient: n-octanol/water: No data available - testing not performed

Auto-ignition temperature: No data available - testing not performed

Decomposition temperature: No data available - testing not performed

Viscosity: No data available - testing not performed

Explosive properties: No data available - testing not performed

Oxidizing properties: No data available - testing not performed

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: incompatible materials, Heat, flames and sparks.

Incompatible materials: Strong oxidizing agents, Strong acids and strong bases, active metals.

Hazardous decomposition products: None under normal conditions of use.

11. Toxicological information

Effects of Exposure

General advice: The toxicological properties of this material have not been fully investigated and its handling and use may present additional hazards.

Contains: Carbon black. Since the 2006 IARC Monograph for carbon black was published, several investigators have challenged the animal evidence of carcinogenicity as being linked to species specific responses to lung overload that should not be used to predict human risk. While carbon black is carcinogenic to rats following inhalation or intratracheal exposure, it is not carcinogenic to mice, guinea pigs, rabbits or non-human primates by the inhalation route of exposure, or to hamsters by inhalation or intratracheal exposure. In their discussion of interspecies extrapolation, IARC notes that the inflammation seen with lung overload is associated with fibrosis and tumor formation in rats, while in humans fibrosis is reported, but not
tumor formation. In December 2006, following publication of the monograph, Carter et al, detailed mechanisms of lung inflammation demonstrating that rats, as compared to mice and hamsters, exhibited the greatest pro-inflammatory response. In addition, a 2008 community based case-control study of cancer risk from occupational exposure to carbon black found no excess risk of lung cancer, further supporting the classification of inadequate evidence in humans. Collectively, the available animal data and human epidemiology studies suggest that carbon black, as contained in this product, does not present a cancer risk to the end user if the handling and personal protective measures contained within this Safety Data Sheet are understood and followed.

**Inhalation:** Expected to be a low hazard for recommended handling.

**Eyes:** May cause transient irritation.

**Skin:** Expected to be a low hazard for recommended handling.

**Ingestion:** Expected to be a low hazard for recommended handling.

**Data for Glycerol (CAS 56-81-5):**

**Acute Toxicity Data:**
Oral LD50 (Rat): 12,600 mg/kg
- Inhalation LC50 (Rat): > 2.75 mg/l / 4 hr
- Dermal LD50 (Rabbit): > 10 g/kg
- Skin irritation: slight
- Eye irritation: very slight

**Data for Carbon black (CAS 1333-86-4):**

**Acute Toxicity Data:**
Oral LD50 (Rat): > 5,000 mg/kg
- Inhalation LC50 (Rat): > 4.6 mg/m3 / 4 hr (no deaths occurred)
- Dermal LD50 (Rabbit): > 3,000 mg/kg
- Skin irritation: No skin irritation
- Sensitisation (Guinea pig): Did not cause sensitisation on laboratory animals.
- Eye irritation: No eye irritation

**Mutagenicity/Genotoxicity Data:**
- Salmonella typhimurium assay (Ames test) (TA98, TA100, TA1535, TA1537, TA1538): negative (in presence and absence of activation)
- Mouse lymphoma assay: negative (in presence of activation)

**Carcinogenicity**

U.S. National Toxicology Program (NTP): No component of this product present
at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

American Conference of Governmental Industrial Hygienists (ACGIH): A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans: Carbon black

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

U.S. Occupational Safety and Health Administration (OSHA): OSHA Carcinogen or Potential Carcinogen: Carbon black

California Prop. 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

**Potential Toxicity:**

- Toxicity to fish (LC50): > 100 mg/l estimated
- Toxicity to daphnia (EC50): > 100 mg/l estimated

**Persistence and degradability:** Readily biodegradable

This product has not been tested for environmental effects.

**Bioaccumulative potential**

No data available

**Mobility in soil**

No information available.

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information
Not regulated for all modes of transportation.

### 15. Regulatory information

**Notification status**

<table>
<thead>
<tr>
<th>Regulatory List</th>
<th>Notification status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>All listed</td>
</tr>
<tr>
<td>DSL</td>
<td>All listed</td>
</tr>
<tr>
<td>NDSL</td>
<td>None listed</td>
</tr>
<tr>
<td>EINECS</td>
<td>All listed</td>
</tr>
<tr>
<td>ELINCS</td>
<td>Listed</td>
</tr>
<tr>
<td>NLP</td>
<td>None listed</td>
</tr>
<tr>
<td>AICS</td>
<td>All listed</td>
</tr>
<tr>
<td>IECS</td>
<td>All listed</td>
</tr>
<tr>
<td>ENCS</td>
<td>All listed</td>
</tr>
<tr>
<td>ECI</td>
<td>All listed</td>
</tr>
<tr>
<td>NZIoC</td>
<td>All listed</td>
</tr>
<tr>
<td>PICCS</td>
<td>All listed</td>
</tr>
<tr>
<td>TCSI</td>
<td>All listed</td>
</tr>
</tbody>
</table>

"Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements.

**Other regulations**

- **U.S. - CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):** No components of this product are subject to the SARA Section 302 (40 CFR 302.4) reporting requirements.

- **U.S. - CERCLA/SARA - Section 302 (40 CFR § 355 Appendices A and B - The List of Extremely Hazardous Substances and Their Threshold Planning Quantities):** No components of this product are subject to the SARA Section 302 (40 CFR 355) reporting requirements.
### U.S. - CERCLA/SARA - Section 313 (40 CFR § 372.65 Toxic Chemical Release Reporting):

No components of this product are subject to the SARA Section 313 (40 CFR 372.65) reporting requirements.

### U.S. - California - 8 CCR Section 5200-5220 - Specifically Regulated Carcinogens:

No components found on the California Specifically Regulated Carcinogens List.

### U.S. - California - 8 CCR Section 5203 Carcinogens:

No components found on the California Section 5203 Carcinogens List.

### U.S. - California - 8 CCR Section 5209 Carcinogens:

No components found on the California Section 5209 Carcinogens List.

### U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:

Carbon black

### U.S. - Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):

Glycerol, Carbon black

### U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):

Glycerol, Carbon black

### U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):

Glycerol, Carbon black

### U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):

Water, Glycerol, Carbon black

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### 16. Other information

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

**US/Canadian Label Statements:**

**EKFTF Ink**

**Contains:**
Components either non-hazardous or below regulatory thresholds (proprietary)

**Hazard statements:** Not hazardous according to GHS/Hazard Communication regulations.
This Safety Data Sheet has been compiled and is solely intended for this product. The information is based upon the present state of our knowledge.

R-1, S-1, F-0, C-0