Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 1/12



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

Product name: Specialty White Ink, Type EWDTG1

Product code: 7464886

Synonyms: None.

Relevant identified uses of the substance or mixture and uses advised against: Identified uses: ink or inkjet chemical

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York 14650

IN EMERGENCY, telephone: 1-800-424-9300 or +1 703-527-3887.

For further information about this product, call (800) 242-2424.

## 2. Hazards identification

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

Hazard class	Hazard category	Route of exposure
Carcinogenicity	Category 2	
Specific target organ toxicity -	Category 2	Oral
repeated exposure		
Acute aquatic toxicity	Category 3	
Chronic aquatic toxicity	Category 3	

### **GHS-Labelling**

#### Contains:

titanium dioxide (13463-67-7), Ethylene glycol (107-21-1), 1,2-Benzisothiazol-3(2H)-one (2634-33-5)

#### Symbol(s):



Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 2/12

### Signal word: Warning

**Hazard statements:** Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if swallowed. Harmful to aquatic life with long lasting effects.

#### **Precautionary statements:**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response: Get medical advice/ attention if you feel unwell.

**Disposal:** Dispose of contents/container in accordance with local/regional/national/international regulation.

HMIS IV Hazard Ratings: Health - 1\*, Flammability - 1, Physical Hazard - 0

NFPA Hazard Ratings: Health - 1, Flammability - 1, 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

Weight percent	Components - (CAS-No.)
5 - 10	titanium dioxide (13463-67-7)
5 - 10	Ethylene glycol (107-21-1)
1 - 5	Glycerol (56-81-5)
0.1 - 1	N,N-diethylethanamine (121-44-8)
0.01 - < 0.05	1,2-Benzisothiazol-3(2H)-one (2634-33-5)

### 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 irritation develops and persists. Wash contaminated clothing before re-use.

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 3/12

**Ingestion:** If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Most important symptoms and effects, both acute and delayed:** Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

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

Treatment: No information available.

### 5. Firefighting measures

Extinguishing Media: Water spray, Dry chemical, Carbon dioxide (CO2), Foam.

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

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 4/12

**Personal precautions:** Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapour. Use only with adequate ventilation. 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. Cool conditions (5 - 30°C). Keep container tightly closed. Keep away from food, drink and animal feeding stuffs. Keep away from incompatible substances (see Incompatibility section.)

### 8. Exposure controls/personal protection

#### Occupational exposure controls

Chemical name	Regulatory List	Value Type	Value
titanium dioxide	ACGIH	Time weighted average	10 mg/m3
titanium dioxide	OSHA	Time weighted average	15 mg/m3
			Form of exposure: total dust
		Time weighted average	10 mg/m3
			Form of exposure: total dust
		Short term exposure limit	20 mg/m3
			Form of exposure: total dust
Ethylene glycol	ACGIH	Time weighted average	25 ppm
			Form of exposure: vapor fraction
		Short term exposure limit	50 ppm
			Form of exposure: vapor fraction
		Short term exposure limit	10 mg/m3
		•	able particulate matter, aerosol only
		Ceiling Limit Value	50 ppm 125 mg/m3
			Form of exposure: vapor
Glycerol	OSHA	Time weighted average	5 mg/m3
			of exposure: mist, respirable fraction
		Time weighted average	15 mg/m3
			n of exposure: mist, total particulate
		Time weighted average	10 mg/m3
			Form of exposure: total dust
			Remarks: mist
		Time weighted average	5 ppm
		F	orm of exposure: respirable fraction
			Remarks: mist

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 5/12

**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 protective gloves/ protective clothing.

**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: white

Odour: No data available - testing not performed

Specific gravity: No data available - testing not performed

Vapour pressure: No data available - testing not performed

Vapour density: No data available - testing not performed

Water solubility: No data available - testing not performed

pH: No data available - testing not performed

Flash point: No data available - testing not performed

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

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 6/12

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: No data available

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: None under normal conditions of use.

### **11. Toxicological information**

#### Effects of Exposure

#### General advice:

Contains: titanium dioxide. This substance is classified as a Carcinogen by OSHA.

Contains: Ethylene glycol. severe effects after repeated or prolonged exposure Can cause kidney damage.

Contains: N,N-diethylethanamine. Airborne exposure may cause visual disturbances.

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

Eyes: May cause transient irritation.

Skin: Causes mild skin irritation.

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 7/12

**Ingestion:** May cause irritation of the gastrointestinal tract if swallowed. May cause damage to organs through prolonged or repeated exposure if swallowed.

### Data for titanium dioxide (CAS 13463-67-7):

### Acute Toxicity Data:

Oral LD50 (Rat): > 3,200 mg/kg (10% in water)

- Oral LD50 (Mouse): > 3,200 mg/kg (10% in water)
- Dermal LD50 (Guinea pig): > 1,000 mg/kg
- Skin irritation: slight
- Sensitisation (Guinea pig): none
- Eye irritation: No eye irritation

### Data for Ethylene glycol (CAS 107-21-1):

### Acute Toxicity Data:

Oral LDLo (Humans): 1,600 mg/kg

- Oral LD50 (Rat): 4,700 mg/kg
- Inhalation (Rat): 2.5 mg/l / 6 hr
- Dermal LD50 (Rabbit): 10,607 mg/kg
- Dermal LD50 (Rat): 10,600 mg/kg
- Skin irritation: Mild skin irritation
- Sensitisation (human): none
- Sensitisation (Guinea pig): none
- Eye irritation: none

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

#### Acute Toxicity Data:

Oral LD50 (Rat): 12,600 mg/kg

- Inhalation LC50 (Rat): > 570 mg/m3 / 1 hr
- Dermal LD50 (Rabbit): > 10 g/kg
- Skin irritation: slight
- Eye irritation: very slight

#### Data for N,N-diethylethanamine (CAS 121-44-8):

#### Acute Toxicity Data:

Oral LD50 (Rat): 460 mg/kg

- Inhalation LC50: 1,000 mg/l / 4 hr
- Inhalation LC50 (Rat): 1250 ppm / 4 hr
- Dermal LD50: 570 mg/kg
- Dermal LD50 (Rabbit): 415 mg/kg
- Skin irritation: Extremely corrosive and destructive to tissue.
- Eye irritation: severe

#### Mutagenicity/Genotoxicity Data:

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 8/12

- Ames test: negative (in presence and absence of activation)
- Chromosomal aberration assay: positive (in presence of activation)

### Data for 1,2-Benzisothiazol-3(2H)-one (CAS 2634-33-5):

### Acute Toxicity Data:

Oral LD50 (Rat): 1,020 mg/kg

### Carcinogenicity

American Conference of Governmental Industrial Hygienists (ACGIH):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
International Agency for Research on Cancer (IARC):	Group 2B - Possibly Carcinogenic to Humans: titanium dioxide
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.
U.S. Occupational Safety and Health Administration (OSHA):	OSHA Carcinogen or Potential Carcinogen: titanium dioxide
California Prop. 65	WARNING! This product contains a chemical known to the State of California to cause cancer.
	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

# **12. Ecological information**

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

### **Potential Toxicity:**

Toxicity to fish (LC50):	10 - 100 mg/l estimated
Toxicity to daphnia (EC50):	10 - 100 mg/l estimated
Persistence and degradability:	Not readily biodegradable.

This product has not been tested for environmental effects.

Revision Date: 04/14/2020 000000060575/Version: 1.2 Print Date: 05/27/2020 Page: 9/12

### **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.

For more transportation information, go to: www.kodak.com/go/ship.

### 15. Regulatory information

#### **Notification status**

Regulatory List	Notification status
TSCA	Not all listed
DSL	Not all listed
NDSL	None listed
EINECS	Not all listed
ELINCS	None listed
NLP	None listed
AICS	Not all listed
IECS	Not all listed
ENCS	Not all listed
ECI	Not all listed
NZIoC	Not all listed
PICCS	Not all listed

# Safety Data Sheet

Revision Date: 04/14/2020 000000060575/Version: 1.2 Print Date: 05/27/2020 Page: 10/12

TCSI	Not all listed
TSCA 12(b)	Listed

"Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

# Other regulations

U.S CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):	Ethylene glycol
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):	Ethylene glycol
U.S California - 8 CCR Section 339 - Director's List of Hazardous Substances:	Ethylene glycol
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 Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):	titanium dioxide , Ethylene glycol , Glycerol
U.S Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	titanium dioxide , Ethylene glycol , Glycerol
U.S New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	titanium dioxide , Ethylene glycol , Glycerol
U.S Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Water , Non-hazardous components (59476) , titanium dioxide , Ethylene glycol , Proprietary (60211) , Glycerol , Non-hazardous components (60557) , N,N- diethylethanamine

Revision Date: 04/14/2020 000000060575/Version: 1.2 Print Date: 05/27/2020 Page: 11/12

### 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:**

### Specialty White Ink, Type EWDTG1

#### Contains:

titanium dioxide (13463-67-7), Ethylene glycol (107-21-1), 1,2-Benzisothiazol-3(2H)-one (2634-33-5)

### Symbol(s):



### Signal word: Warning

**Hazard statements:** Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if swallowed. Harmful to aquatic life with long lasting effects.

#### **Precautionary statements:**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response: Get medical advice/ attention if you feel unwell.

**Disposal:** Dispose of contents/container in accordance with local/regional/national/international regulation.

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.

# Safety Data Sheet

Revision Date: 04/14/2020 00000060575/Version: 1.2 Print Date: 05/27/2020 Page: 12/12