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

**1.1. Product identifier:** Specialty Yellow Ink, Type EYDTG2

**Product code:** 7442619

Synonyms: None.

# **1.2.** Relevant identified uses of the substance or mixture and uses advised against:

1.2.1. Identified uses: ink or inkjet chemical

**1.3. Details of the supplier of the safety data sheet:** KODAK LIMITED, Building 8, Croxley Green Business Park, Hatters Lane, Watford, WD18 8PX, Great Britain

For further information about this product, telephone 0870-2430270 or email kes@kodak.com.

## **1.4. Emergency telephone number:**

Available during office hours only. IN EMERGENCY, telephone: 844 892 0111.

### 2. Hazards identification

| 2.1. Classification of the substance or mixture<br>Classification according to Regulation (EC) No 1272/2008 (CLP): |            |                   |  |
|--|------------|-------------------|--|
| Hazard class / Hazard  | Hazard     | Route of exposure |  |
| category   | statements |                   |  |
| Skin Sens. 1   | H317       |                   |  |
| STOT RE 2  | H373       | Oral              |  |
| Aquatic Chronic 3  | H412       |                   |  |

### 2.2. Label elements:

Labelling according to 1272/2008/EC [CLP/GHS]:

Contains: ethanediol, triethylamine, 1,2-benzisothiazol-3(2H)-one

Symbol(s):

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Signal word: Warning

## Hazard statements:

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure if swallowed. *Kidney* 

Harmful to aquatic life with long lasting effects.

### **Precautionary statements:**

### Prevention

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. Avoid release to the environment.

### Response

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. Get medical advice/ attention if you feel unwell.

### Disposal

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

## 2.3. Other hazards

None known.

| 3. Composition/information on ingredients |           |                                     |  |  |  |
|---|-----------|-------------------------------------|--|--|--|
| Weight<br>percent                         | Component | CAS-No.<br>EC No.<br>REACH Reg. No. | Classification<br>according to<br>1272/2008/EC | Classification<br>according to<br>67/548/EEC |  |
| 5 - 10                                    | glycerol  |                                     |  |  |  |

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|           |                | 56-81-5<br>200-289-5<br>not available  | **                                     | ** |
|-----------|----------------|--|--|----|
| 5 - 10    | ethanediol     |  |  |    |
|           |                | 107-21-1<br>203-473-3<br>not available | Acute Tox. 4 H302<br>*                 | *  |
| 0.1 - < 1 | triethylamine  |  |  |    |
|           |                | 121-44-8                               | Flam. Liq. 2 H225                      | *  |
|           |                | 204-469-4<br>not available             | Acute Tox. 4 H302<br>Acute Tox. 4 H312 |    |
|           |                | not available                          | Acute Tox. 4 H312<br>Acute Tox. 4 H332 |    |
|           |                |  | Skin Corr. 1A H314                     |    |
|           |                |  | STOT SE 3 H335                         |    |
|           |                |  | *                                      |    |
| 0.1 - <   | 1,2-benzisothi | azol-3(2H)-one                         |  |    |
| 0.25      |                | 2634-33-5                              | Acute Tox. 4 H302                      | *  |
|           |                | 220-120-9                              | Skin Irrit. 2 H315                     |    |
|           |                | not available                          | Eye Dam. 1 H318                        |    |
|           |                |  | Skin Sens. 1 H317                      |    |
|           |                |  | Aquatic Acute 1 H400                   |    |

Full text of R- and H-phrases: see Section 16.

\* Substance classification as listed in Annex VI to Regulation (EC) No 1272/2008

\*\* Substance not listed in Annex VI to Regulation (EC) No 1272/2008

## 4. First aid measures

## 4.1. Description of first aid measures

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

**4.1.2. Skin:** Wash off immediately with soap and plenty of water. Get medical attention if symptoms occur. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

**4.1.3. 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.

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

**4.2. Most important symptoms and effects, both acute and delayed:** Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. Skin Irritation: Signs/symptoms may include localized redness, swelling, itching,

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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.

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

## 5. Firefighting measures

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

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

**5.2.1. Hazardous Combustion Products:** Carbon oxides, Nitrogen oxides (NOx)

5.2.2. Unusual Fire and Explosion Hazards: None.

**5.3.** Advice for firefighters: Wear self-contained breathing apparatus and protective suit. Fire or excessive heat may produce hazardous decomposition products.

### 6. Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures:** Refer to protective measures listed in sections 7 and 8.

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

**6.3. 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.

**6.4. Reference to other sections:** See Section 8 for recommendations on the use of personal protective equipment.

## 7. Handling and storage

## 7.1. Precautions for safe handling

**7.1.1. 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.

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

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

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**7.2. 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.)

7.3. Specific end use(s): No information available.

| 8. Exposure controls/personal protection |   |
|--|---|
|  | - |

## 8.1. Control parameters

8.1.1. Occupational exposure controls

| Chemical name | Regulatory<br>List | Value Type                | Value                              |
|---------------|--------------------|---------------------------|------------------------------------|
| glycerol      | EH40               | Time weighted average     | 10 mg/m3                           |
|               |                    |                           | Form of exposure: mist             |
|               |                    | Short term exposure limit | 30 mg/m3                           |
|               |                    |                           | Form of exposure: mist             |
|               |                    |                           | Remarks: calculated                |
| ethanediol    |                    | Time weighted average     | 10 mg/m3                           |
|               |                    |                           | Form of exposure: particulates     |
|               |                    | Time weighted average     | 20 ppm 52 mg/m3                    |
|               |                    |                           | Form of exposure: vapour           |
|               |                    | Short term exposure limit | 40 ppm 104 mg/m3                   |
|               |                    |                           | Form of exposure: vapour           |
|               |                    | Short term exposure limit | 30 mg/m3                           |
|               |                    |                           | Form of exposure: particulate      |
|               |                    |                           | Remarks: calculated                |
|               |                    |                           | Potential for cutaneous absorption |
| ethanediol    | HSA                | Time weighted average     | 20 ppm 52 mg/m3                    |
|               |                    |                           | Form of exposure: vapour           |
|               |                    | Time weighted average     | 10 mg/m3                           |
|               |                    |                           | Form of exposure: particulate      |
|               |                    | Short term exposure limit | 40 ppm 104 mg/m3                   |
|               |                    |                           | Form of exposure: vapour           |
|               |                    | Short term exposure limit | 30 mg/m3                           |
|               |                    |                           | Form of exposure: particulate      |
|               |                    |                           | Remarks: calculated                |
|               |                    |                           | Potential for cutaneous absorption |

8.2. Exposure controls

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**8.2.1.** 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.

#### 8.2.2. Individual protection measures, such as personal protective equipment

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

**Hand protection:** Using the information provided in Section 2, seek the advice of the glove supplier as to the most suitable glove material. Avoid skin contact when mixing or handling the substance/preparation or a mixture by wearing impervious gloves and protective clothing appropriate to the risk of exposure.

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact:

| Material       | Thickness  | Breakthrough time |
|----------------|------------|-------------------|
| Nitrile rubber | >= 0.38 mm | > 480 min         |
| Neoprene       | >= 0.65 mm | > 240 min         |
| butyl-rubber   | >= 0.36 mm | > 480 min         |

Avoid natural rubber gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

**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.

**General health and safety measures:** Safety shower, eye wash, washing facilities as appropriate to condition of use.

#### **8.2.3. Environmental exposure controls:** No information available.

#### 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state: liquid

Colour: yellow

Odour: No data available - testing not performed

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Odour Threshold: No data available - testing not performed **pH:** No data available - testing not performed Melting point/freezing point: No data available - testing not performed Initial boiling point and boiling range: 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 Vapour pressure: No data available - testing not performed Vapour density: No data available - testing not performed Specific gravity: No data available - testing not performed Water solubility: 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**

**10.1. Reactivity:** No data available

**10.2. Chemical stability:** Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions: Hazardous polymerisation does not occur.

## 10.4. Conditions to avoid: No data available

**10.5.** Incompatible materials: Strong oxidizing agents.

#### **10.6.** Hazardous decomposition products: None under normal conditions of use.

#### **11. Toxicological information**

#### **Effects of Exposure**

#### General advice:

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

Contains: triethylamine. Airborne exposure may cause visual disturbances.

#### Toxicokinetics, metabolism and distribution

No data available

#### Acute toxicity

No data available

## **Corrositivity and irritation**

• Skin irritation: slight

#### Sensitisation

• Skin Sensitization: positive

### CMR effects Germ cell mutagenicity

No information available.

### Carcinogenicity

No information available.

### **Reproductive toxicity**

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No information available.

## Specific target organ toxicity - single exposure

No information available.

## Specific target organ toxicity - repeated exposure

• Ingestion (Kidney): May cause damage to organs through prolonged or repeated exposure.

## **Aspiration hazard**

No information available.

### Information on likely routes of exposure

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

Eyes: May cause transient irritation.

Skin: Causes mild skin irritation. May cause an allergic skin reaction.

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

## 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 ethanediol (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

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- Eye irritation: none
- Sensitisation (human): none
- Sensitisation (Guinea pig): none

## Data for triethylamine (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:

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

## **12. Ecological information**

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

## 12.1. Toxicity

Toxicity to fish (LC50): 10 - 100 mg/l estimated

Toxicity to daphnia (EC50): 10 - 100 mg/l estimated

## 12.2. Persistence and degradability

Persistence and degradability: Not readily biodegradable.

## 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

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No information available.

## 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

No information available.

## Additional ecological information:

This product has not been tested for environmental effects.

## 13. Disposal considerations

### 13.1. Waste treatment methods

Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorised waste management companies.

**Waste material:** Waste material is currently classified as hazardous waste under Directive 2008/98/EC, as amended. European Waste Catalogue EWC: 08 03 12 waste ink containing dangerous substances

**Product containers:** If thoroughly cleaned, preferably by rinsing at least three times with small quantities of water, waste product packaging may be consigned for recovery or disposal as non hazardous waste. Whenever possible, minimize waste by using the rinsing water to make up the working solution. The European Waste Catalogue Code is 15 01 02 plastic packaging.

Dispose of contents/container in accordance with local regulation. The product does not need to be labelled in accordance with EC directives or respective national laws.

### 14. Transport information

Not regulated for all modes of transportation.

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

### 15. Regulatory information

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 1907/2006/EC - Annex XIV - Substances Subject to Authorization

This mixture does not contain substances which are subject to an authorization according to Regulation (EC) No. 1907/2006 (REACH).

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## 1907/2006/EC - Potential Substances of Very High Concern

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

# Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

This mixture does not contain substances listed in Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

## 1907/2006/EC Article 59(1) - Candidate List of Substances Subject to Authorisation

This mixture contains no ingredient which is subject to an authorisation according to Regulation (EC) No. 1907/2006 (REACH).

### 1907/2006/EC - Annex XVII - Restrictions on Certain Dangerous Substances

This mixture does not contain ingredients which are subject to restrictions according to Regulation (EC) No. 1907/2006 (REACH)

## **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      |
| TCSI            | Not all 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.

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## 15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

## 16. Other information

### 16.1. Indication of changes

Corrected/updated: composition data classification(s) label information European Waste Catalogue

Review Safety Data Sheet before using product.

#### 16.2. Key or legend to abbreviations and acronyms used in the safety data sheet

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road: AICS = Australian Inventory of Chemical Substances: CAS = Chemical Abstracts Service; CLP = Classification, Labelling, and Packaging; DSL = Canada Domestic Substances List; EC = European Commission; EC50 = Effective Concentration 50%; ECI = Korea Existing Chemicals list; EH40 = EH40/2005 Workplace Exposure Limits; EINECS = European Inventory of Existing Commercial chemical Substances; ELINCS = European List of Notified Chemical Substances; ENCS = Japan Existing and New Chemical Substances; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; HSA = Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents); IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IC50 = Inhibitory Concentration 50%; IECS = China Inventory of Existing Chemical Substances; IMDG = International Maritime Dangerous Goods; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; mg/Kg = milligrams per Kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; NDSL = Canada Non-Domestic Substances List; NLP = Europe No Longer Polymers; NZIoC = New Zealand Inventory of Chemicals; PBT = Persistent, Bioaccumulative and Toxic substances; PICCS = Philippines Inventory of Chemicals and Chemical Substances; ppm = parts per million; REACH= Registration, Evaluation and Authorization of Chemicals; RID = European Agreement concerning the International Carriage of Dangerous Goods by Rail: TSCA = Toxic Substances Control Act; vPvB = very Persistent, very Bioaccumulative substances

### 16.3. Key literature references and sources for data

Available upon request.

# 16.4. Methods used for classification of mixture according to Regulation (EC) No 1272/2008

The determination of classifications is derived via expert judgment and/or weight of evidence.

### 16.5. Relevant R- and H-phrases

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| ŀ | H225 | Highly flammable liquid and vapour.   |
|---|------|---|
| ŀ | 1302 | Harmful if swallowed.   |
| ŀ | H312 | Harmful in contact with skin.   |
| ŀ | H314 | Causes severe skin burns and eye damage.  |
| ŀ | H315 | Causes skin irritation.   |
| ŀ | H317 | May cause an allergic skin reaction.  |
| ŀ | H318 | Causes serious eye damage.  |
| ŀ | 1332 | Harmful if inhaled.   |
| ŀ | H335 | May cause respiratory irritation.   |
| ŀ | 1373 | May cause damage to organs through prolonged or repeated exposure if swallowed. |
| ŀ | H400 | Very toxic to aquatic life.   |
| ŀ | 412  | Harmful to aquatic life with long lasting effects.                              |
|   |      |   |

## 16.6. Training advice

Review Safety Data Sheet before using product.

## 16.7. Further information

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.