

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

Product name: EDTA

**Product code: 10055007** 

Synonyms: None.

Relevant identified uses of the substance or mixture and uses advised against: Identified uses: ink or inkjet chemical. For industrial use only.

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

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

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
Combustible Dust		
Acute toxicity	Category 4	Oral
Eye irritation	Category 2A	
Acute aquatic toxicity	Category 2	

#### **GHS-Labelling**

**Contains:** Ethylenediaminetetraacetic acid (60-00-4)

### Symbol(s):



Signal word: Warning

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#### Hazard statements:

May form combustible dust concentrations in air. Harmful if swallowed. Causes serious eye irritation. Toxic to aquatic life.

### **Precautionary statements:**

**Prevention:** Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ eye protection/ face protection. Avoid release to the environment.

**Response:** 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. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water.

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

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Physical Hazard - 1

NFPA Hazard Ratings: Health - 2, Flammability - 1, Instability - 1

NOTE: HMIS III 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<br/>percentComponents - (CAS-No.)100Ethylenediaminetetraacetic acid (60-00-4)

#### 4. First aid measures

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

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention if symptoms persist.

Skin: Wash off with soap and water. Get medical attention if symptoms occur.

**Ingestion:** If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Call a physician or poison control centre immediately.

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

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

Treatment: No information available.

#### 5. Firefighting measures

Extinguishing Media: Water mist, Carbon dioxide (CO2), Dry chemical. Do NOT use water jet.

Special hazards arising from the substance or mixture Hazardous Combustion Products: Carbon oxides, Nitrogen oxides (NOx), (see also Hazardous Decomposition Products sections.)

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

Unusual Fire and Explosion Hazards: Dust may form explosive mixture in air.

#### 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:** Remove all sources of ignition. Avoid generation of dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Shovel into suitable container for disposal. Non-sparking tools should be used. Clean surface thoroughly to remove residual contamination.

Prevent runoff from entering drains, sewers, or streams.

#### Environmental precautions: No information available.

### 7. Handling and storage

#### Precautions for safe handling

**Personal precautions:** Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

**Prevention of Fire and Explosion:** Dust may form explosive mixture in air. Minimize dust generation and accumulation. Use only with adequate ventilation. Keep away from sources of ignition - No smoking. Refer to NFPA 654, "Standard for the Prevention of Fire and Dust Explosions from the

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Manufacturing, Processing, and Handling of Combustible Particulate Solids." Keep from contact with oxidizing materials.

**Conditions for safe storage, including any incompatibilities:** Store in corrosive resistant container with resistant inliner. Keep only in original container. Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

### 8. Exposure controls/personal protection

Occupational exposure controls: Not established

**Appropriate engineering controls:** Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

#### 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:** None should be needed under normal conditions of use. If engineering controls do not maintain airborne concentrations to an acceptable level, 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: solid (crystalline, powder)

Colour: white

Odour: none

Specific gravity: 1.46

Vapour pressure: No data available

Vapour density: No data available

Melting point/range: 248 °C (478.4 °F)

Water solubility: (0.05 g/l at 20 °C)

# Safety Data Sheet

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**pH:** 2.5

Flash point: > 100 °C (> 212.0 °F) (closed cup) DIN 51758

**Evaporation rate:** No data available

Flammability (Solid; gas): No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Partition coefficient: n-octanol/water: log Pow= -3.86

Auto-ignition temperature: > 200.0 °C (> 392.0 °F) (DIN 51794)

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

#### **10. Stability and reactivity**

Reactivity: No data available

Chemical stability: Stable under normal conditions.

No exotherm to 500 °C byHPDTA

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: No data available

Incompatible materials: Strong oxidizing agents, Strong bases, Aluminium, Copper, Metals.

Hazardous decomposition products: Nitrogen oxides (NOx)

### **11. Toxicological information**

Effects of Exposure

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**General advice:** This compound can chelate metals and may alter calcium and other cation balances.

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

Eyes: Causes serious eye irritation.

Skin: Prolonged or repeated skin contact may cause irritation.

Ingestion: Harmful if swallowed.

#### Acute Toxicity Data:

Oral LD50 (Rat): > 3,200 mg/kg

- Oral LD50 (Rat): 1,600 3,200 mg/kg
- Inhalation LCLo (Rat): 1.48 mg/kg / 7 hr
- Dermal LD50 (Guinea pig): > 1,000 mg/kg (Highest dose tested no evidence of absorption at this dose level.)
- Skin irritation: slight
- Skin Sensitization (Rabbit): none
- Eye irritation: Irritating to eyes.

### 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):	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
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):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
California Prop. 65	This product does not contain any chemicals known to State of

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California to cause cancer, birth defects, or any other reproductive harm.

### **12. Ecological information**

Data for this material were used to estimate its environmental impact.

#### **Potential Toxicity:**

Toxicity to fish (LC50):	Lepomis macrochirus (Bluegill sunfish): 34 - 62 mg/l (Exposure time: 96 hr)
Toxicity to fish (LC50):	Pimephales promelas (fathead minnow): 44.2 - 76.5 mg/l (Exposure time: 96 hr)
Toxicity to daphnia (EC50):	Daphnia magna (Water flea): 113 mg/l (Exposure time: 48 hr)
Toxicity to algae (EC50):	Desmodesmus subspicatus: 1.01 mg/l (Exposure time: 72 hr)
Persistence and degradability:	Readily biodegradable.

#### **Bioaccumulative potential**

Partition coefficient: n-octanol/water log Pow= -3.86

#### 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

The information below is provided to assist in documentation. It represents the dangerous goods classification before any regulatory exceptions are taken (e.g. "limited quantity") and therefore may not represent the final classification. The final classification as it pertains to the product packaging configuration (including labeling, marking, and exceptions) may be obtained via the Dangerous Goods Worksheet which can be found at www.kodak.com/go/ship.

IATA:	UN number:	UN3082
	Proper shipping name: Class: Packaging group:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethylenediaminetetraacetic acid) 9 III
IMDG:	UN number:	UN3082
	Proper shipping name: Class: Packaging group:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethylenediaminetetraacetic acid) 9 III
US DOT:	UN number:	UN3082
	Proper shipping name: Class: Packaging group: Reportable Quantity: Reportable Quantity:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethylenediaminetetraacetic acid) 9 III Ethylenediaminetetraacetic acid 5,000 lb

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

# 15. Regulatory information

### **Notification status**

Notification status
All listed
All listed
None listed
All listed
None listed
None listed
All listed
All listed
All listed
All listed
All listed

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PICCS

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.

### Other regulations

U.S CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):	Ethylenediaminetetraacetic acid
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 339 - Director's List of Hazardous Substances:	Ethylenediaminetetraacetic acid
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):	Ethylenediaminetetraacetic acid
U.S Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	No components found on the Minnesota Employee Right-to- Know List of Hazardous Substances.
U.S New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	Ethylenediaminetetraacetic acid
U.S Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Ethylenediaminetetraacetic acid

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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:**

### EDTA

**Contains:** Ethylenediaminetetraacetic acid (60-00-4)

Symbol(s):



Signal word: Warning

#### Hazard statements:

May form combustible dust concentrations in air. Harmful if swallowed. Causes serious eye irritation. Toxic to aquatic life.

# Precautionary statements:

**Prevention:** Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ eye protection/ face protection. Avoid release to the environment.

**Response:** 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. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water.

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

**FIRST AID:** If symptomatic, move to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention if symptoms persist. Wash off with soap and water. Get medical attention if symptoms occur. If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Call a physician or poison control centre immediately. Keep out of reach of children. Do not handle or use until safety

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precautions in Material Safety Data Sheet (MSDS) have been read and understood. Since emptied containers retain product residue, follow label warnings even after container is emptied. **IN CASE OF FIRE:** Water mist, Carbon dioxide (CO2), Dry chemical. Do NOT use water jet. **IN CASE OF SPILL:** Remove all sources of ignition. Avoid generation of dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Shovel into suitable container for disposal. Non-sparking tools should be used. Clean surface thoroughly to remove residual contamination. Prevent runoff from entering drains, sewers, or streams.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

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