

# Material Safety Data Sheet



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

**Product name:** KODAK Brown Toner

**Product code:** 1464452

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

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

For other information or to request an MSDS, call (800) 242-2424.

**Synonyms:** PCD 6591

**Product Use:** Toner

## 2. Hazards identification

**CONTAINS:** Potassium polysulfides (37199-66-9)

**DANGER!**

**CONTACT WITH ACID LIBERATES FLAMMABLE AND POISONOUS GAS**

**CAUSES SKIN AND EYE BURNS**

**DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT**

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED**

**NFPA Hazard Ratings:** Health - 3, Flammability - 1, Instability - 0

NOTE: NFPA 704 (2007) hazard indexes involves data review and interpretation that may vary among companies. It is 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 %	Components - (CAS-No.)
70 - 75	Water (7732-18-5)
20 - 25	Potassium polysulfides (37199-66-9)
5 - 10	Sodium carbonate (497-19-8)

## 4. First aid measures

**Inhalation:** If inhaled, remove to fresh air. Get medical attention.

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

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**Ingestion:** If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

## Notes to physician:

**Treatment:** Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended. Treatment should be continued until pH of tears reaches neutral.

## 5. Fire-fighting measures

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

**Hazardous Combustion Products:** Carbon oxides, Sulphur oxides, (see also Hazardous Decomposition Products section).

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

## 6. Accidental release measures

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

## 7. Handling and storage

**Personal precautions:** Do not breathe vapours or spray mist. Keep container tightly closed. Do not get in eyes and avoid contact with skin and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

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

**Storage:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

## 8. Exposure controls / personal protection

**Occupational exposure controls:** Not established

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: N95 Particulate Filter. A full-face positive-pressure air-supplied respirator must be worn if hazardous decomposition products are likely to be released or have been released. See Stability and Reactivity Section. If respirators are used, a

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program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

**Eye protection:** Wear safety glasses with side shields (or goggles) and a face shield.

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

### 9. Physical and chemical properties

**Physical form:** liquid

**Colour:** amber

**Odour:** sulphurous

**Specific gravity:** 1.24

**Vapour pressure:** 24 mbar (18.0 mm Hg)

**Vapour density:** 0.6

**Volatile fraction by weight:** 70 - 75 %

**Boiling point/boilingrange:** > 100.0 °C (> 212.0 °F)

**Water solubility:** complete

**pH:** 12.9

**Flash point:** does not flash

### 10. Stability and reactivity

**Stability:** Stable under normal conditions.

**Incompatibility:** Acids, Strong oxidizing agents. Contact with acid liberates flammable and poisonous gas.

**Hazardous decomposition products:** Sulphur oxides, hydrogen sulphide.

**Hazardous Polymerization:** Hazardous polymerisation does not occur.

### 11. Toxicological information

#### Effects of Exposure

**Inhalation:** Harmful if inhaled. If hydrogen sulphide gas is liberated due to contact with acid, it may cause headache, nausea, dizziness, confusion, weakness, unconsciousness, convulsions, and death.

**Eyes:** Causes eye burns.

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**Skin:** Harmful if absorbed through skin. Causes skin irritation.

**Ingestion:** Harmful if swallowed. If free gastric acidity is high, hydrogen sulfide is liberated in the stomach and may cause systemic toxic effects such as vomiting, respiratory depression, tremors, convulsions and death.

## Acute Toxicity Data:

- Oral LD50 (rat): 1,600 mg/kg
- Skin irritation: severe (The product may be absorbed through the skin.)
- Skin irritation: Corrosive (4-hour DOT Skin Corrosivity Test, Destruction of skin tissue as a result of more than 3 minutes exposure.)
- Eye irritation: severe

## 12. Ecological information

Environmental data are not 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 given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

**IATA:** UN Number: UN3267  
Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Potassium polysulfides)  
Class: 8  
Packaging group: II

**IMDG:** UN Number: UN3267  
Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium polysulfides)  
Class: 8  
Packaging group: II

**US DOT:** UN Number: UN3267  
Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Potassium polysulfides)  
Class: 8  
Packaging group: II

For more transportation information, go to: [www.kodak.com/go/ship](http://www.kodak.com/go/ship).

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## 15. Regulatory information

### Notification status

Regulatory List	Notification status
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	n (Negative listing)
INV (CN)	n (Negative listing)

A N (Negative listing) 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

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:	none
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
US. Pennsylvania Worker and Community Right-to-Know Law (34	Water, Potassium polysulfides, Sodium

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Pa. Code Chap. 301-323):	carbonate
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Potassium polysulfides, Sodium carbonate

## 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:

**CONTAINS: Potassium polysulfides (37199-66-9)**

**DANGER!**

**CONTACT WITH ACID LIBERATES FLAMMABLE AND POISONOUS GAS**

**CAUSES SKIN AND EYE BURNS**

**DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT**

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED**

Do not breathe vapours or spray mist.

Do not get in eyes and avoid contact with skin and clothing.

Keep container tightly closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**FIRST AID:** If inhaled, remove to fresh air. Get medical attention. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes. If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

**Notes to physician:** Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended. Treatment should be continued until pH of tears reaches neutral.

Keep out of reach of children.

Do not handle or use until safety 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:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**IN CASE OF SPILL:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

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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.

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R-1, S-3, F-1, C-0