

MATERIAL SAFETY DATA SHEET

200000715/F/USA  
Approval Date: 07/29/2003  
Print Date: 10/09/2003  
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK 28% Acetic Acid

Catalog Number(s): 146 2829 - 1 pint (U.S.)

Manufacturer/Supplier: EASTMAN KODAK COMPANY, Rochester, New York 14650

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

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

Synonym(s): KAN 354786, PCD 2923, F-0006.500

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

|       |                           |
|-------|---------------------------|
| 70-75 | Water (007732-18-5)       |
| 25-30 | Acetic acid (000064-19-7) |

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3. HAZARDS IDENTIFICATION

CONTAINS: Acetic acid (000064-19-7)

DANGER!

POISON

MAY BE FATAL OR HARMFUL IF SWALLOWED

VAPOR EXTREMELY IRRITATING TO THE EYES AND RESPIRATORY TRACT

CAUSES SEVERE SKIN AND EYE BURNS

HMIS Hazard Ratings:

Health - 3, Flammability - 0, Reactivity - 0, Personal Protection - D

NFPA Hazard Ratings:

Health - 2, Flammability - 0, Reactivity (Stability) - 0

NOTE: HMIS and NFPA 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. The personal protection index is only intended for general guidance on personal protection equipment (PPE) that is suitable for the potential hazards of the material. PPE (e.g., respirators) may not be needed if engineering controls (e.g., local ventilation) are adequate. An asterisk (\*), in the HMIS health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

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4. FIRST-AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Eyes: Immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.

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Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

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5. FIRE FIGHTING MEASURES

Extinguishing Media: Use appropriate agent for adjacent fire.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: None (noncombustible).

Unusual Fire and Explosion Hazards: None

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6. ACCIDENTAL RELEASE MEASURES

Flush to sewer with large amounts of water. Otherwise, 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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7. HANDLING AND STORAGE

Personal Precautionary Measures: Do not breathe vapor at concentrations greater than the exposure limits. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: No special precautionary measures should be needed under anticipated conditions of use.

Storage: Keep container closed.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

Acetic acid: 10 ppm TWA; 15 ppm STEL

OSHA (USA) Permissible Exposure Limit (PEL - 1971 Table Z-1 Values):

Acetic acid: 10 ppm TWA; 25 mg/m3 TWA

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: Full-face organic vapor cartridge. If respirators are used, a program should be instituted to assure compliance with OSHA

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Standard 29 CFR 1910.134.

Eye Protection: If a full-face respirator is not worn, wear vapor-tight chemical goggles.

Skin Protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Recommended Decontamination Facilities: Eye bath, washing facilities, safety shower

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid  
Color: Colorless  
Odor: Sharp  
Specific Gravity (water = 1): 1.036  
Vapor Pressure at 20°C (68°F): 24 mbar (18 mm Hg)  
Vapor Density (Air = 1): 1.0  
Volatile Fraction by Weight: 100 %  
Boiling Point: >100°C (>212°F)  
Solubility in Water: Complete  
pH: 3.0  
Flash Point: None, noncombustible liquid

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10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: None with common materials and contaminants with which the material may reasonably come into contact.

Hazardous Polymerization: Will not occur.

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11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occurred, and the ventilation rate in the room.

Inhalation: Vapor extremely irritating.

Eyes: Causes severe burns. Vapor extremely irritating.

Skin: Causes severe burns.

Ingestion: May be fatal or harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.

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Acute Toxicity Data:

Oral LD-50 (rat): > 3.2 mL/kg

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12. ECOLOGICAL INFORMATION

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

Potential Toxicity

|                    |      |
|--------------------|------|
| Fish LC50 mg/l:    | >100 |
| Daphnid EC50 mg/l: | >100 |
| Algal IC50 mg/l:   | >100 |

Organics Readily Degradable ( >70% ): Yes (7 days)

Potential Bioaccumulation: Log Pow <1

COD (approximate g/l): 300

BOD5 (approximate g/l): 215

Potential Toxicity

Waste treatment microorganisms EC50 (mg/l): >100

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13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Flush to sewer with large amounts of water.

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14. TRANSPORT INFORMATION

For transportation information regarding this product call the Kodak Worldwide Transportation Hazmat Hot Line: (585) 722-2400 between 8 a.m. and 5 p.m. (Eastern Standard Time), Monday through Friday.

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15. REGULATORY INFORMATION

- Material(s) known to the State of California to cause cancer: None
  - Material(s) known to the State of California to cause adverse reproductive effects: None
  - Carcinogenicity Classification (components present at 0.1% or more):
    - International Agency for Research on Cancer (IARC): None
    - American Conference of Governmental Industrial Hygienists (ACGIH): None
    - National Toxicology Program (NTP): None
    - Occupational Safety and Health Administration (OSHA): None
  - Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: None
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16. OTHER INFORMATION

US/Canadian Label Statements:

CONTAINS: Acetic acid (000064-19-7)

DANGER!

POISON

MAY BE FATAL OR HARMFUL IF SWALLOWED

CAUSES SEVERE SKIN AND EYE BURNS

VAPOR EXTREMELY IRRITATING TO THE EYES AND RESPIRATORY TRACT

Do not breathe vapor at concentrations greater than the exposure limits.

Do not get in eyes, on skin, on clothing.

Use only with adequate ventilation.

Wash thoroughly after handling.

FIRST AID: If swallowed, do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes and skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

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.

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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.  
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R-2, S-3, F-0, C-0