

Material Safety Data Sheet

Product No. 26956 KODAK Indicator Stop Bath

Issue Date (01-17-07)

Review Date (07-25-07)

Section 1: Product and Company Identification

Product Name: KODAK Indicator Stop Bath

Synonym: PCD 2838

Supplier: Eastman Kodak Company, Rochester, New York, 14650

Company Name

Ted Pella, Inc. and PELCO International, P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Composition / Information on Ingredients

Components: Principle Hazardous Component(s) (chemical and common name(s))(Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Acetic acid (64-19-7)	85 – 90	25	10 PPM	No	No	No

Section 3: Hazard Identification

Emergency overview

Appearance: Light yellow liquid.

Immediate effects: Danger! Poison. May be fatal or harmful if swallowed. Dust, mist or vapor extremely irritating to the eyes and respiratory tract. Causes severe skin and eye burns.

Combustible liquid and vapor.

Potential health effects

Primary Routes of entry: Inhalation, ingestion, eyes and skin.

Signs and Symptoms of Overexposure:

Eyes: Causes severe eye burns. Vapor extremely irritating to the eyes.

Skin: Causes severe skin burns.

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

Inhalation: Vapor extremely irritating to the respiratory tract.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None.

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact: Immediately flush 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.

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

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

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by 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.

Section 5: Fire Fighting Measures

Flash Point: 53°C (128°F) (Setaflash closed cup)

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media: Water spray, carbon dioxide (CO₂), dry chemical, alcohol foam.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Unusual Fire and Explosion

Hazards: Concentrate: Carbon dioxide, carbon monoxide.

Hazardous combustion products: Classified as combustible. Material contains a combustible solvent that may accumulate in the container headspace.

DOT Class: Corrosive and flammable.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be Taken in Handling and Storage: Do not breathe vapor at concentrations greater than the exposure limits. Use only with adequate ventilation. Keep from contact with oxidizing materials. Keep away from heat and flame. Keep container closed.

Storage temperature: Ambient

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Good general ventilation (typically 10 air changes per hour) should be used. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Personal Protection Equipment

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.

Protective gloves: Wear impervious gloves.

Skin protection: Appropriate protective clothing.

Eye protection: Concentrate: If a full-face respirator is not worn, wear vapor-tight chemical goggles. Working solution: Wear safety glasses with side shields (or goggles).

Additional clothing and/or equipment: Eye bath, safety showers, and washing facilities.

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Light yellow liquid.

Odor (threshold): Sharp vinegar;

Specific Gravity (H₂O=1): 1.07

Vapor Pressure (mm Hg @ 20 °C [68 °F]): 19.5 mbar (14.6 mm Hg)

Vapor Density (air=1): 1.9

Percent Volatile by volume: 100 %

Evaporation Rate (butyl acetate=1): ND

Boiling Point: >100°C (>212°F)

Freezing point / melting point: ND

pH: Concentrate: < 2;

Solubility in Water: Complete

Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: ND

Materials to Avoid (Incompatibility): Strong oxidizing agents, bases.

Hazardous Decomposition Products: ND

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed: Acetic acid (64-19-7): Oral LD₅₀ (rat): 3,310 - 3,530 mg/kg. Oral LD₅₀: 4,960 mg/kg. Inhalation LC₅₀: 5620 ppm / 1.00 hr. Dermal LD₅₀: 1,060 mg/kg

Skin irritation: severe. Eye irritation: severe.

General advice: Contains: Acetic acid. 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: Airborne dust/mist/vapor extremely irritating.

Eyes: Causes severe eye burns. Airborne dust/mist/vapor extremely irritating.

Skin: Causes severe skin burns.

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

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information The following properties are ESTIMATED from the components of the preparations:

Potential Toxicity:

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

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

Toxicity to algae (IC50): > 100 mg/l

Toxicity to other organisms (EC50): > 100 mg/l

Ecological Information: Chemical Oxygen Demand (COD): 940 g/l. **Biochemical** Oxygen Demand (BOD): 680 g/l

Chemical Fate Information: Persistence and degradability: Readily biodegradable

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: Emptied containers retain product residue, follow label warnings even after container is emptied. Contract with a licensed chemical disposal agency.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Proper shipping name: Acetic acid solution

Hazard Class: 8, 3

Packaging group: II

UN Number: UN2789

IATA: Proper shipping name: Acetic acid solution

Hazard Class: 8, 3

Packing group: II

UN Number: UN2789

IMO: Proper shipping name: Acetic acid solution

Class: 8, 3

UN Number: UN2789

Packing group: II

Marine Pollutant: No

Canadian TDG: Proper shipping name: Acetic acid solution

Section 15: Regulatory Information

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Section 302: None listed

SARA Title III: Section 313: Not listed

RCRA: Not listed

TSCA: Listed TSCA inventory.

CERCLA: Acetic acid (64-19-7): RQ = 5000 lbs (2270 kg).

State Regulations

California Proposition 65: None

International Regulations

Canada WHMIS: Materials in this product are listed in the CPR Inventory List.

Europe EINECS Numbers: Acetic acid (64-19-7): EINECS#: 200-580-7.

KECI (KR): Negative listing: Bromocresol Purple (115-40-2) or Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis(2-bromo-6-methyl

Section 16: Other Information

Label Information: CONTAINS: Acetic acid (64-19-7). Danger! Poison. May be fatal or harmful if swallowed dust, mist or vapor extremely irritating to the eyes and respiratory tract causes severe skin and eye burns combustible liquid and vapor. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling.

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

NFPA Hazard Rating: Concentrate: Health: **2**; Fire: **2**; Reactivity: **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.

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.