

# Safety Data Sheet

Revision Date: 03/27/2015  
Z17000000252/Version: 3.1  
Print Date: 04/08/2015  
Page: 1/11

**Kodak** alaris

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

**Product name:** KODAK EKTACOLOR SMPU P2/RA-2SM KIT, Part B

**Product code:** 1701325 - Part B

**Synonyms:** PCD 5777

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

**Identified uses:** photographic processing chemical (bleach/bleach fixer). For industrial use only.

**Supplier:** Kodak Alaris Inc., 2400 Mount Read Boulevard, Rochester, NY 14615

IN EMERGENCY, telephone: 1-800-424-9300 or +1 703-527-3887.

For further information about this product, email [EHS-Questions@Kodakalaris.com](mailto:EHS-Questions@Kodakalaris.com).

## 2. Hazards identification

**Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:**

Hazard class	Hazard category	Route of exposure
Corrosive to metals	Category 1	--
Eye irritation	Category 2A	--
Skin irritation	Category 2	--
Respiratory sensitisation	Category 1	--

### GHS-Labeling

**Contains:**

Ammonium ferric ethylenediaminetetraacetic acid (21265-50-9), Acetic acid (64-19-7)

**Symbol(s):**



**Signal word:** Danger

# Safety Data Sheet

Revision Date: 03/27/2015  
Z17000000252/Version: 3.1  
Print Date: 04/08/2015  
Page: 2/11

---

**Hazard statements:** May be corrosive to metals. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements:**

**Prevention:** Keep only in original container. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/ eye protection/ face protection. Wash hands thoroughly after handling. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**Response:** IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. Absorb spillage to prevent material damage.

**Storage:** Store in corrosive resistant container with resistant inliner.

**Disposal:** Dispose of contents/container in accordance with local/regional/national/international 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 percent	Components - (CAS-No.)
70 - 75	Water (7732-18-5)
20 - 25	Ammonium ferric ethylenediaminetetraacetic acid (21265-50-9)
1 - 5	Acetic acid (64-19-7)

## 4. First aid measures

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

# Safety Data Sheet

Revision Date: 03/27/2015  
Z17000000252/Version: 3.1  
Print Date: 04/08/2015  
Page: 3/11

---

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Remove contact lenses. If eye irritation persists: Get medical advice/attention.

**Skin:** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**Ingestion:** Get medical attention if symptoms occur.

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

**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:** None.

## 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:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. 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**

# Safety Data Sheet

Revision Date: 03/27/2015  
Z17000000252/Version: 3.1  
Print Date: 04/08/2015  
Page: 4/11

**Personal precautions:** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

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

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

## 8. Exposure controls/personal protection

### Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Ammonium ferric ethylenediaminetetra acetic acid	ACGIH	Time weighted average	1 mg/m3
Acetic acid		Time weighted average	<i>Expressed as Fe</i> 10 ppm
		Short term exposure limit	15 ppm
	OSHA	Time weighted average	10 ppm 25 mg/m3

**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.

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

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

**Hand protection:** Wear protective gloves/ protective clothing.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, a NIOSH 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:** liquid

**Colour:** reddish-brown

**Odour:** slight ammonia

## Safety Data Sheet

Revision Date: 03/27/2015  
Z17000000252/Version: 3.1  
Print Date: 04/08/2015  
Page: 5/11

---

**Specific gravity:** 1.10

**Vapour pressure (at 20.0 °C (68.0 °F)):** 24 mbar (18.0 mm Hg)

**Vapour density:** 0.6

**Boiling point/boiling range:** > 100 °C (> 212.0 °F)

**Water solubility:** complete

**pH:** 5.6

**Flash point:** does not flash

**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:** No data available

**Auto-ignition temperature:** No data available

**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.

**Possibility of hazardous reactions:** Hazardous polymerisation does not occur.

**Conditions to avoid:** No data available

# Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 6/11

**Incompatible materials:** Strong bases, sodium hypochlorite (bleach), Oxidizing agents, Metals. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with strong bases may liberate ammonia.

**Hazardous decomposition products:** Ammonia, chloramine, Nitrogen oxides (NO<sub>x</sub>)

## 11. Toxicological information

### Effects of Exposure

#### General advice:

Contains: Ammonium ferric ethylenediaminetetraacetic acid. This compound can chelate metals and may alter calcium and other cation balances.

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:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Eyes:** Causes serious eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** May cause irritation of the gastrointestinal tract if swallowed.

#### Data for Acetic acid (CAS 64-19-7):

##### Acute Toxicity Data:

Oral LD50 (Rat): 3,320 mg/kg

- Oral LD50 (Rat): 3,310 mg/kg
- Inhalation LC50 (Rat): 11.4 mg/l / 4 hr
- Dermal LD50 (Rabbit): 1,060 mg/kg
- Skin irritation: severe
- Eye irritation (washed eyes): severe
- Eye irritation (unwashed eyes): severe

##### Carcinogenicity

## Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 7/11

---

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

### 12. Ecological information

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

#### Potential Toxicity:

Toxicity to fish (LC50): > 100 mg/l

Toxicity to daphnia (EC50): > 100 mg/l

**Persistence and degradability:** Readily biodegradable

#### Bioaccumulative potential

No data available

#### Mobility in soil

No information available.

## Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 8/11

### 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](http://www.kodak.com/go/ship).

**IATA:** UN number: UN3265  
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Acetic acid)  
Class: 8  
Packaging group: III

**IMDG:** UN number: UN3265  
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Acetic acid)  
Class: 8  
Packaging group: III

**US DOT:** UN number: UN3265  
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
(Acetic acid)  
Class: 8  
Packaging group: III

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

### 15. Regulatory information

#### Notification status

Regulatory List	Notification status
TSCA	All listed
DSL	Not all listed
NDSL	Listed



## Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 9/11

---

EINECS	All listed
ELINCS	None listed
NLP	None listed
AICS	All listed
IECS	All listed
ENCS	Not all listed
ECI	Not all listed
NZIoC	All listed
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):	Acetic 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):	Ammonium ferric ethylenediaminetetraacetic acid
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	Ammonium ferric ethylenediaminetetraacetic acid , Acetic 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):	Acetic acid

# Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 10/11

U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	Ammonium ferric ethylenediaminetetraacetic acid , Acetic acid
U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	Acetic acid
U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Water , Ammonium ferric ethylenediaminetetraacetic acid , Acetic acid

## 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:

#### KODAK EKTACOLOR SMPU P2/RA-2SM KIT, Part B

##### Contains:

Ammonium ferric ethylenediaminetetraacetic acid (21265-50-9), Acetic acid (64-19-7)

##### Symbol(s):



**Signal word:** Danger

**Hazard statements:** May be corrosive to metals. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

##### Precautionary statements:

**Prevention:** Keep only in original container. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/ eye protection/ face protection. Wash hands thoroughly after handling. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

**Response:** IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get

## Safety Data Sheet

Revision Date: 03/27/2015

Z17000000252/Version: 3.1

Print Date: 04/08/2015

Page: 11/11

---

medical advice/ attention. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. Absorb spillage to prevent material damage.

**Storage:** Store in corrosive resistant container with resistant inliner.

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

**FIRST AID:** If symptomatic, move to fresh air. Any material that contacts the eye should be washed out immediately with water. Wash off with soap and water. Get medical attention if symptoms occur. 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. 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-2, S-2, F-1, C-0