# Material Safety Data Sheet



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

**Product name:** KODAK EKTACOLOR PC111 Rinse Tablets / RA-4

**Product code:** 1913110

**Supplier:** KODAK AUSTRALASIA Pty. Ltd., Level 2, 436 Johnston Street, Abbotsford, Victoria, 3067

For Chemical Emergency Information, in Australia call 1800 033111 (24 hour service Australia-wide); in New Zealand call 0800 734 607 (24 hour service); in Asia call +86 21 63500836

For Other Information, call 61 3 8417 8000.

**Synonyms:** PCD 6467

**Product Use:** Professional colour paper photographic processing chemical, For industrial use only.

## 2. Hazards identification

**STATEMENT OF HAZARDOUS NATURE:** Hazardous according to criteria of Australian Safety and Compensation Council

**Harmful, Dangerous for the environment.** Harmful if swallowed. Irritating to eyes and respiratory system. Contact with acids liberates toxic gas. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Poisons Schedule:** 5
**Contains:** Sodium dichloro-S-triazine-trione, Boric acid

## 3. Composition/information on ingredients

| Weight percent | Components (CAS-No.) |
|---|---|
| 80 - 85 | Sodium sulphate (7757-82-6) |
| 10 - 15 | Sodium dichloro-S-triazine-trione (2893-78-9) |
| 5 - 10 | Boric acid (10043-35-3) |

## 4. First aid measures

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

**Eyes:** Immediately flush the contaminated eye(s) with water for at least 60 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. Contact a physician or poison control center immediately. Continue flushing the eye(s) until the physician advises to stop. If necessary, continue flushing during transport to an emergency care facility.

**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.

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

**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.

## 5. Fire-fighting measures

**Hazchem Code:** Not specified

**Extinguishing Media:** Water spray, Carbon dioxide (CO2), Dry chemical. Use water spray to cool unopened containers. Do not add water to a closed container.

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products. USE WATER WITH CAUTION. Material reacts with water. Water may be ineffective. Use water spray to cool unopened containers.

**Hazardous Combustion Products:** Carbon oxides, Sulphur oxides, nitrogen oxides (NOx), (see also Hazardous Decomposition Products sections.)

**Unusual Fire and Explosion Hazards:** Mixture contains an oxidizing material and may increase the burning rate of combustible materials. Elevated temperature can cause decomposition. Reacts with water. Contact with water liberates toxic gas Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Greatly increases the burning rate of combustible materials. Contamination with moisture or humid air liberates chlorine.

## 6. Accidental release measures

Collect in a noncombustible container for prompt disposal. Damp tablets may decompose to give off chlorine fumes. Avoid breathing fumes. Wash away residues with copious amounts of water. Clean surface thoroughly to remove residual contamination. Prevent runoff from entering drains, sewers, or streams. Flush with plenty of water.

## 7. Handling and storage

**Personal precautions:** Do not breathe dust. Do not get in eyes, on skin, or on 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 away from heat and sources of ignition. Keep from any contact with water. Do not allow water to get into container because of reaction. Keep away from combustible material. Remove and wash contaminated clothing promptly.

**Storage:** Store in cool place. Store in original container. Keep container tightly closed and dry. Do not store or ship together with combustible materials. Contents may develop pressure if exposed to water. 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 below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

**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. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

**Eye protection:** If a full-face respirator is not worn, wear safety glasses with side shields or goggles.

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

## 9. Physical and chemical properties

**Physical form:** solid (tablet)

**Colour:** white

**Odour:** chlorine

**Specific gravity:** no data available

**Vapour pressure:** no data available

**Vapour density:** no data available

**Melting point/range:** no data available

**Water solubility:** Decomposes in contact with water.

**pH:** not applicable

**Flash point:** not applicable

**Flammability Limits:** Not specified

## 10. Stability and reactivity

**Stability:** Stable; however the substance can decompose at elevated temperature, depending on specific conditions of use. Safe handling temperatures are dependent on specific conditions of use and are typically substantially below the onset temperature. Consult your technical safety experts.

Exotherm onset temperature: 102 °C by DSC

**Incompatibility:** Water, Strong acids, Strong bases, sodium hypochlorite (bleach), Combustible material, strong reducing agents Material reacts with water. Pressure may develop in container if contents are exposed to water. Contact with water liberates toxic gas Material can react violently with combustible materials or strong reducing agents. Contamination with moisture or humid air liberates chlorine.

**Hazardous decomposition products:** Ammonia, chlorine, hydrogen chloride, Sulphur oxides, nitrogen oxides (NOx).

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

## 11. Toxicological information

### Effects of Exposure

**General advice:**

Contains: Sodium dichloro-S-triazine-trione. The toxicological properties of this material have not been fully investigated and its handling and use may present additional hazards.

Contains: Boric acid. Based on repeated-dose ingestion studies in animals, may cause adverse reproductive and developmental effects. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure.

**Inhalation:** Irritating to respiratory system.

**Eyes:** Irritating to eyes.

**Skin:** Expected to be a low hazard for recommended handling.

**Ingestion:** Harmful if swallowed.

### Data for Sodium sulphate (CAS 7757-82-6):

### Acute Toxicity Data:
Oral LD50 (rat): 3,200 - 6,400 mg/kg

- **Skin irritation: No skin irritation**
- **Eye irritation: slight**

### Mutagenicity/Genotoxicity Data:
Salmonella/Mammalian-Microsome Reverse Mutation Screening Assay (TA98, TA100, TA1535, TA1537): negative (in presence and absence of activation)

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

### Carcinogenicity:

- Oral study (rat, ): NOEL; 630 mg/kg/day

### Data for Sodium dichloro-S-triazine-trione (CAS 2893-78-9):

### Acute Toxicity Data:
Oral LD50 (rat): 735 mg/kg

- Inhalation LC50 (rat): > 50 mg/l / 1 hr
- Dermal LD50 (rat): > 5,000 mg/kg
- Dermal LD50 (rabbit): > 2,000 mg/kg

### Data for Boric acid (CAS 10043-35-3):

### Acute Toxicity Data:
Oral LD50 (rat): > 1,600 mg/kg

- Inhalation LC50 (rat): > 2.03 mg/l / 4 hr
- Dermal LD50 (rabbit): > 2,000 mg/kg
- Skin irritation: moderate
- Skin Sensitization (guinea pig): none

- Eye irritation: slight irritation

### Mutagenicity/Genotoxicity Data:

Salmonella/Mammalian-Microsome Reverse Mutation Screening Assay (TA98, TA100, TA1535, TA1537, TA1538): negative (in presence and absence of activation)

- Mouse lymphoma assay: negative (in presence and absence of activation)
- Sister chromatid exchange (SCE) assay (Chinese Hamster Ovary (CHO)): negative (in presence and absence of activation)
- Unscheduled DNA synthesis (UDS) assay (rat hepatocytes): negative (in absence of activation)
- Mouse micronucleus assay: negative

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

### Repeated dose toxicity:

- Feeding study (24 months, male and female rat): NOAEL; 100 mg/kg/day
- Feeding study (24 months, male and female rat): Lowest observable effect level; 334 mg/kg/day (target organ effects: testes)

### Developmental Toxicity Data:

Oral (female rat): maternal NOAEL; 78mg/kg/day

- Oral (female rat): NOAEL for developmental toxicity; < 78mg/kg/day

### Reproductive Toxicity Data:

Feeding Study (male and female mouse): NOEL for reproductive toxicity; < 152 mg/kg/day

### Carcinogenicity:

- Oral study (females mouse, 2 years): NOEL; 1,150 mg/kg/day

## 12. Ecological information

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

**Potential Toxicity:**

| | |
|---|---|
| Toxicity to fish (LC50): | 1 - 10 mg/l |
| Toxicity to daphnia (EC50): | < 1 mg/l |

**Persistence and degradability:** Not readily biodegradable.

## 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

Not regulated for all modes of transportation.

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

## 15. Regulatory information

**Notification status**

| Regulatory List | Notification status |
|---|---|
| TSCA | All listed |
| DSL | All listed |
| NDSL | None listed |
| EINECS | All listed |
| ELINCS | None listed |
| NLP | None listed |
| AICS | All listed |
| IECS | All listed |
| ENCS | All listed |
| ECI | 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.

**Poisons Schedule:** 5

**Australian Safety and Compensation Council:** none

**Other regulations**

| | |
|---|---|
| Australia National Model Regulations for the Control of Scheduled Carcinogenic Substances | No components listed |

## 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. The actual label information will depend upon the intended use of the product. Australian Safety and Compensation Council labeling appears for commercial/industrial use.

**Australian Safety and Compensation Council Labeling:**

**Contains:** Sodium dichloro-S-triazine-trione %

| | |
|---|---|
| **Symbol/Indication of Danger:** | Xn: Harmful<br>N: Dangerous for the environment |
| **Risk Phrases:** | R22: Harmful if swallowed.<br>R36/37: Irritating to eyes and respiratory system.<br>R31: Contact with acids liberates toxic gas.<br>R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| **Safety Phrases:** | S36/37: Wear suitable protective clothing and gloves.<br>S57: Use appropriate container to avoid environmental contamination. |

**National Health and Medical Research Council Standard for the Uniform Scheduling of Drugs and Poisons Labeling:**

**CAUTION**
**KEEP OUT OF REACH OF CHILDREN**
**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**
**DO NOT SWALLOW**
**Contains:** Sodium dichloro-S-triazine-trione, Boric acid

**Safety Phrases:** Avoid contact with skin or eyes. Avoid breathing dust (or) vapour (or) spray mist.

**First aid:** For advice, contact a Poisons Information Centre (Australia 13 1126; New Zealand 0800 764 766) or a doctor. If swallowed, do NOT induce vomiting. If in eyes, wash out immediately with water. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.