Material Safety Data Sheet

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

Product name: KODAK EKTACOLOR RA Developer Replenisher RT, Part A

Product code: 4036570 - Part A

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 6076

Product Use: photographic processing chemical (developer/activator), For industrial use only.

2. Hazards identification

STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of Australian Safety and Compensation Council

Poisons Schedule: 5
Contains: Triethanolamine

3. Composition/information on ingredients

Weight percent	Components (CAS-No.)
20 - 25	Triethanolamine (102-71-6)
10 - 15	N,N-diethylhydroxylamine (3710-84-7)

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.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Get medical attention if symptoms occur.

Ingestion: If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

5. Fire-fighting measures

Hazchem Code: Not specified

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool unopened containers.

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

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

Unusual Fire and Explosion Hazards: Classified as combustible. Material contains a combustible solvent that may accumulate in the container headspace. Elevated temperature can cause decomposition.

6. Accidental release measures

Remove all sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Contaminated absorbent should be disposed of in accordance with local regulations. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Do not breathe mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat and sources of ignition. Use only with adequate ventilation. Keep from contact with oxidizing materials.

Storage: Store in cool place. 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
Triethanolamine	Exposure Standards	time weighted average	5 mg/m3
Triethanolamine	WEL	time weighted average	5 mg/m3

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 below recommended exposure limits, an approved respirator must be worn. Respirator type: organic vapour. 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: 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: liquid

Colour: yellow

Odour: amine

Specific gravity: 1.05

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

Vapour density: 0.6

Volatile fraction by weight: 60 - 65 %

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

Water solubility: complete

pH: 10.9

Flash point: 65 °C (149.0 °F)

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable under normal conditions. 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: 169 °C by DSC

Incompatibility: Strong oxidizing agents

Hazardous decomposition products: nitrogen oxides (NOx).

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Triethanolamine. Based on animal data, may cause adverse effects on the following organs/systems: kidney, liver.

Contains: N,N-diethylhydroxylamine. The toxicological properties of this material have not been fully investigated and its handling and use may present additional hazards.

Inhalation: Expected to be a low hazard for recommended handling.

Eyes: No specific hazard known. May cause transient irritation.

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

Ingestion: Expected to be a low ingestion hazard.

Data for Triethanolamine (CAS 102-71-6):

Acute Toxicity Data:
Oral LD50 (rat): 9,119 mg/kg

- Dermal LD50 (rat): > 17,984 mg/kg
- Dermal LD50 (rabbit): > 22,480 mg/kg
- Skin irritation: Mild skin irritation
- Skin Sensitization (guinea pig): negative
- Eye irritation: Irritating to eyes.

Data for N,N-diethylhydroxylamine (CAS 3710-84-7):

Acute Toxicity Data:
Oral LD50 (rat): 2,190 mg/kg

- Inhalation LC50 (rat): 3140 ppm / 4 hr
- Dermal LD50 (rabbit): 1,300 mg/kg
- Skin irritation: severe
- Skin Sensitization (guinea pig): negative
- Eye irritation (unwashed eyes): moderate

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:

- Inhalation (28-day, male and female rat): NOAEL; 150 ppm/6 hours/day

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.

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	Not all listed
NDSL	Listed
EINECS	Not all listed
ELINCS	None listed
NLP	None listed
AICS	Not 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

Australian Safety and Compensation Council Labeling:

Not classified as hazardous according to criteria of Australian Safety and Compensation Council

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

CAUTION
KEEP OUT OF REACH OF CHILDREN
DO NOT SWALLOW
READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Contains: Triethanolamine (247.275 g/L)

Warning: Irritant.

Safety Phrases: Avoid contact with skin or eyes.

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.

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-1, S-2, F-2, C-1HT