

Material Safety Data Sheet

Revision Date: 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 1/6



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

Product name: KODAK FLEXICOLOR SM Tank Developer / C-41SM, Part B

Product code: 1756337 - Part B

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 5339

Product Use: photographic processing chemical (developer/activator), 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 in contact with skin and if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed. Limited evidence of a carcinogenic effect. Irritating to eyes and skin. May cause sensitization by skin contact. Very toxic to aquatic organisms.

Contains no scheduled poisons

3. Composition/information on ingredients

Weight percent	Components (CAS-No.)
25 - 30	Bis(hydroxylammonium) sulphate (10039-54-0)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

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: Absorption of this material into the body leads to the formation of methemoglobin that, in sufficient concentration, causes cyanosis. Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by

Material Safety Data Sheet

Revision Date 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 2/6

supportive measures such as bed rest and oxygen inhalation. Thorough cleansing of the entire contaminated area of the body, including scalp and nails, is of utmost importance. If cyanosis is severe, intravenous injection of methylene blue, one milligram per kilogram of body weight, may be of value.

5. Fire-fighting measures

Hazchem Code: 2X

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 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: None (noncombustible), (see also Hazardous Decomposition Products sections.)

Unusual Fire and Explosion Hazards: Mixture contains a strong reducing agent. Reacts violently with oxidizing materials. Dried product residue can act as a reducing agent. May cause spontaneous heating and ignition when absorbed on combustible, porous material (e.g. rags, paper, sawdust, cotton, clothing). Elevated temperature can cause decomposition.

6. Accidental release measures

Absorb spill with vermiculite or other inert material. Collect in a noncombustible container for prompt disposal. Contaminated absorbent should be disposed of in accordance with local regulations. Clean surface thoroughly to remove residual contamination. Flush with plenty of water. Do not store in metal containers.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapour. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat and sources of ignition. Keep from any contact with metals. Remove and wash contaminated clothing promptly. Exercise caution if heating, especially in a closed container. Keep from contact with oxidizing materials, highly oxygenated or halogenated solvents, organic compounds containing reducible functional groups.

Storage: Store in original container. Do not store in metal containers. Contents may develop pressure upon prolonged exposure to heat. Store in cool place. Keep container tightly closed to prevent the loss of water. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls: Not established

Ventilation: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Respiratory protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: organic vapour. If respirators are used, a program should

Material Safety Data Sheet

Revision Date 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 3/6

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: colourless

Odour: odourless

Specific gravity: 1.16

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

Vapour density: 0.6

Boiling point/boiling range: decomposes before boiling

Water solubility: complete

pH: 3.0

Flash point: does not flash

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable in glass and plastic containers, however, becomes unstable in contact with metals. Materials containing similar structural groups can decompose if heated above 150°C (302°F). Safe handling temperatures are dependent on specific conditions of use and are typically substantially below the onset temperature. Consult your technical safety experts.

Incompatibility: Acids, Halogenated compounds, Metals, Strong oxidizing agents Material not stable in contact with metals.

Hazardous decomposition products: Ammonia, sulphur dioxide, nitrogen oxides (NO_x).

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Bis(hydroxylammonium) sulphate. Can cause blood disorders. Can cause cyanosis. There is limited evidence of carcinogenicity in lifetime oral studies in rats.

Material Safety Data Sheet

Revision Date 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 4/6

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

Eyes: Irritating to eyes.

Skin: Harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Data for Bis(hydroxylammonium) sulphate (CAS 10039-54-0):

Acute Toxicity Data:

Oral LD50 (male rat): 100 - 200 mg/kg

- Dermal study (24 hours): 10 mg/kg (target organ effects: red blood cell)
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Skin irritation: strong
- Skin Sensitization (guinea pig): strong
- Eye irritation: slight

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): Daphnia: 1 - 10 mg/l

Toxicity to algae (EC50): < 1 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

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

ADG:	UN number:	UN3264
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Bis(hydroxylammonium) sulphate)
	Class:	8
	Packaging group:	III
	Marine Pollutant status:	Marine pollutant
	Proper shipping name:	
IMDG:	UN number:	UN3264

Material Safety Data Sheet

Revision Date 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 5/6

Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Bis(hydroxylammonium) sulphate)
Class: 8
Packaging group: III
Marine Pollutant status: Marine pollutant
Marine Pollutant(s): Bis(hydroxylammonium) sulphate

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: Not specified

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:

Material Safety Data Sheet

Revision Date 28.12.2011
Print Date: 19.03.2012
000000018931/Version: 1.5
Page: 6/6



Symbol/Indication of Danger:

Xn: Harmful
N: Dangerous for the environment

Risk Phrases:

R21/22: Harmful in contact with skin and if swallowed.
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R40: Limited evidence of a carcinogenic effect.
R36/38: Irritating to eyes and skin.
R43: May cause sensitization by skin contact.
R50: Very toxic to aquatic organisms.

Safety Phrases:

S24: Avoid contact with skin.
S36/37: Wear suitable protective clothing and gloves.
S57: Use appropriate container to avoid environmental contamination.

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

CONTAINS NO SCHEDULED POISONS

First aid: No first aid instructions are recommended for labelling purposes.

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-3, F-0, C-2HT