8-36-05

MATERIAL SAFETY DATA SHEET

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 1/6



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

Product name: KODAK ELON Developing Agent

Product code: 8218240

Manufacturer: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 14020

2. Hazards identification

CONTAINS: Bis(4-hydroxy-N-methylanilinium) sulphate (55-55-0)

WARNING!

MAY CAUSE BLOOD DISORDERS BASED ON ANIMAL DATA
MAY CAUSE CYANOSIS BASED ON ANIMAL DATA
HARMFUL IF INHALED OR SWALLOWED
MIST OR DUST IRRITATING TO THE EYES AND RESPIRATORY TRACT
CAUSES SKIN AND EYE IRRITATION
MAY CAUSE ALLERGIC SKIN REACTION
POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES

HMIS II Hazard Ratings:

Health - 2*, Flammability - 1, Reactivity (Stability) - 0

NFPA Hazard Ratings:

Health - 2, Flammability - 1, Instability - 0

NOTE: HMIS II and NFPA 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. An asterisk (*), in the HMIS II health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

3. Composition/information on ingredients

Weight % Components (CAS-No.)

100 Bis(4-hydroxy-N-methylanilinium) sulphate (55-55-0)

4. First aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention.

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 2/6

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: Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

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 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

Extinguishing Media: water spray, carbon dioxide (CO2), dry chemical.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides (NOx), sulfur oxides

Unusual Fire and Explosion Hazards: Dust may form explosive mixture in air.

6. Accidental release measures

Methods for cleaning up: Shovel into suitable container for disposal. Avoid dust formation. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Dust may form explosive mixture in air. Minimize dust generation and accumulation. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries." Keep from contact with oxidizing materials.

Storage: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls / personal protection

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 3/6

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: N95 Particulate Filter. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29CFR 1910.134 and 29CFR1910.1048.

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

Skin and body protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.

9. Physical and Chemical Properties

Physical form: solid

Colour: white

Odour: odourless

Specific gravity: No data available

Vapour pressure: negligible

Vapor density (air = 1): not applicable

Volatile fraction by weight: negligible

Melting point/range: 271.0 °C (519.8 °F) (Melts with Decomposition)

Water solubility: Moderate

pH: not applicable

Flash point: not applicable, combustible solid

10. Stability and reactivity

Stability: Stable

Incompatibility: Strong oxidizing agents.

Hazardous decomposition products: None under normal conditions of use.

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 4/6

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological information

Effects of Exposure

General advice: Based on animal data, may cause adverse effects on the following organs/systems: blood, kidney, spleen. Based on animal data this material can produce methemoglobin which, in sufficient concentration, causes cyanosis, a blue-gray discoloration of the skin and lips caused by a reduced ability of the blood to carry oxygen.

Inhalation: Harmful if inhaled. Airborne dust irritating.

Eyes: Causes eye irritation. Airborne dust irritating.

Skin: Causes skin irritation. May cause allergic skin reaction.

Ingestion: Harmful if swallowed.

Acute Toxicity Data:

- Oral LD50 (rat): 237 mg/kg
- Oral LD50 (mouse): 565 mg/kg
- Inhalation LC50: / (No data available)
- Dermal: > 1,000 mg/kg (highest dose tested)
- Skin irritation: slight
- Skin irritation: slight to moderate (repeated skin application)
- Skin Sensitization: none
- Eye irritation (unwashed eyes): moderate to strong
- Eye irritation (washed eyes): slight

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:

- Oral (11 days,): LOEL; 1.0 % in diet ((reduced feed intake), (reduced body weight gain), target organ effects: red blood cell)
- Oral (11 days,): NOEL; 0.1 % in diet

12. Ecological information

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

Potential Toxicity:

Fish LC50:

< 1 mg/l

Daphnid EC50:

< 1 mg/l

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 5/6

Algal IC50:

10 - 100 mg/l

Waste treatment organisms EC50:

10 - 100 mg/l

Organics Readily Degradable:

Readily biodegradable

Potential Bioaccumulation:

log Pow 0.04

COD (approximate):

1.26 g/g

BOD (approximate):

 $0.75 \, g/g$

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 transportation information regarding this product call the Kodak Worldwide Transportation Hazmat Hot Line: (585) 722-2400 between 8 a.m. and 5 p.m. (Eastern Standard Time), Monday through Friday. In Canada: General Shipping Information, call: (416) 766-8233.

15. Regulatory information

U.S. California Prop. 65: none

Carcinogenicity Classification (components present at 0.1% or more):

International Agency for Research on Cancer (IARC): none

American Conference of Governmental Industrial Hygienists (ACGIH): none

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none

Chemical(s) subject to the reporting requirements of U.S. Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: none

16. Other information

US/Canadian Label Statements:

CONTAINS: Bis(4-hydroxy-N-methylanilinium) sulphate (55-55-0)

WARNING!

MAY CAUSE BLOOD DISORDERS BASED ON ANIMAL DATA

MAY CAUSE CYANOSIS BASED ON ANIMAL DATA

HARMFUL IF INHALED OR SWALLOWED

MIST OR DUST IRRITATING TO THE EYES AND RESPIRATORY TRACT

Revision Date: 04/11/2005 Z20000003334/Version: 1.0 Print Date: 05/06/2005

Page: 6/6

CAUSES SKIN AND EYE IRRITATION MAY CAUSE ALLERGIC SKIN REACTION POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES

Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Wash thoroughly after handling.

FIRST AID: 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 center immediately. If inhaled, move to fresh air. Treat symptomatically. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. In case of skin contact, immediately flush 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.

Notes to physician: 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 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.

Keep out of reach of children.

For additional information, see Material Safety Data Sheet (MSDS) for this material.

Additional hazard precautions for containers greater than 1 gallon of liquid or 5 pounds of solid:

Since emptied containers retain product residue, follow label warnings even after container is emptied.

IN CASE OF FIRE: Use water spray, carbon dioxide (CO2), dry chemical.

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.