

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 1/6

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

Product name: KS-1

Product code: 30070518

Supplier: Carestream Health, Inc., 150 Verona Street, Rochester, New York 14608; Carestream Health Canada Company, 6 Monogram Place, Suite 200, Toronto, Ontario, M9R 0A1

For Emergency Health Information call, (800) 424-9300

For other information contact 800-328-2910.

Synonyms: None.

2. Hazards identification

WARNING!

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED
MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS BASED ON ANIMAL DATA
EXPOSURE TO HIGH CONCENTRATIONS HAS RESULTED IN INHIBITION OF
NEUROTOXIC ESTERASE IN ANIMAL STUDIES
LOW PHYSICAL HAZARD FOR USUAL INDUSTRIAL OR COMMERCIAL HANDLING**

HMIS II Hazard Ratings:

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

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	Triscresyl phosphate (1330-78-5)

4. First aid measures

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

Eyes: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 2/6

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. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Notes to physician:

Treatment: Not expected to cause organophosphorus-induced delayed neuropathy following acute exposure. Treat as organophosphate poisoning if symptoms and signs are compatible.

5. Fire-fighting measures

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

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, phosphorus oxides

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Methods for 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.

7. Handling and storage

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

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

Storage: Keep container tightly closed. 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

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 3/6

are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

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: liquid

Colour: light yellow

Odour: No data available

Specific gravity: 1.16

Vapour pressure (at 155.0 °C (311.0 °F)) : 0.13 mbar (0.1 mm Hg)

Vapor density (air = 1): No data available

Volatile fraction by weight: No data available

Boiling point/range: 410.0 °C (770.0 °F)

Water solubility: insoluble

pH: No data available

Flash point: 210.0 °C (410.0 °F) (Tag closed cup)

10. Stability and reactivity

Stability: Stable.

Incompatibility: Strong oxidizing agents, bases.

Hazardous decomposition products: None under normal conditions of use.

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice: Exposure to high concentrations has resulted in inhibition of neurotoxic esterase in animal studies. May cause adverse reproductive effects based on animal data.

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 4/6

Structurally similar chemicals have caused nervous system and reproductive effects in animal studies.

Inhalation: Harmful if inhaled.

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

Skin: Harmful if absorbed through skin.

Ingestion: Harmful if swallowed.

12. Ecological information

Data for this substance have been used to estimate its environmental impact.

Potential Toxicity:

Fish LC50: < 1 mg/l

Daphnid EC50: < 1 mg/l

Algal IC50: > 1 mg/l

Waste treatment organisms EC50: > 100 mg/l

Organics Readily Degradable: Readily biodegradable

Potential Bioaccumulation: log Pow 5.11

13. Disposal considerations

Discharge, treatment, or disposal is subject to national, state, provincial, or municipal 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.

US DOT:	UN Number:	UN3082
	Proper shipping name:	Environmentally hazardous substances, liquid, n.o.s. (Triscresyl phosphate)
	Class:	9
	Packaging group:	III
IMDG:	UN Number:	UN3082
	Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Triscresyl phosphate)

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 5/6

	Class:	9
	Packaging group:	III
IATA:	UN Number:	UN3082
	Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (Triscresyl phosphate)
	Class:	9
	Packaging group:	III

For more transportation information, go to: <http://ship.carestreamhealth.com>.

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:

WARNING!

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED
MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS BASED ON ANIMAL DATA
EXPOSURE TO HIGH CONCENTRATIONS HAS RESULTED IN INHIBITION OF
NEUROTOXIC ESTERASE IN ANIMAL STUDIES
LOW PHYSICAL HAZARD FOR USUAL INDUSTRIAL OR COMMERCIAL HANDLING**

Avoid breathing mist or vapour.
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 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: Not expected to cause organophosphorus-induced delayed neuropathy following acute exposure. Treat as organophosphate poisoning if symptoms and signs are compatible.

Material Safety Data Sheet

Revision Date: 04/22/2007
Z20000001729/Version: 1.0
Print Date: 11/11/2010
Page: 6/6

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, foam

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 REPO