


Standard Operating Procedure (SOP)			
<i>Title:</i> Chloramphenicol Crystalline			
<i>Approved by:</i>		<i>Effective Date:</i>	November 14, 2007
David A. Brown, Director, EH&S		<i>Revised Date:</i>	
		<i>Section:</i>	CHEM

PURPOSE

The purpose is to use chloramphenicol crystalline for maximizing plasmid amplification in bacterial cultures and for the selection and growth of chloramphenicol-resistant microorganisms in a safe manner.

SCOPE

The scope of chloramphenicol crystalline is to use in a laboratory environment.

HEALTH, SAFETY, ENVIRONMENTAL INFORMATION

Physical Hazards

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials, dust generation, excess heat.

Incompatibilities with Other Materials: Acids, acid chlorides, acid anhydrides and oxidizing agents.

Hazardous Decomposition Products: Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Health Hazards

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. May cause hemorrhaging of the digestive tract. Exposure may cause anemia and other blood abnormalities.

Inhalation: May cause respiratory tract irritation.

Chronic: May cause cancer in humans. Possible risk of harm to the unborn child.

Personal Protective Equipment

- **Eye Protection**

- Safety glasses, goggles or face shields shall be worn during operations in which chloramphenicol crystalline might contact the eyes (e.g., through vapors or splashes of solution).
- Ordinary (street) prescription glasses do not provide adequate protection. Adequate safety glasses must meet the requirements of the Practice for Occupational Education Eye and Face Protection (ANSI Z87.1-1989) and must be equipped with side shields.
- Contact lenses shall not be worn if the potential exist for chloramphenicol crystalline exposure.

- **Hand Protection**

- Nitrile gloves impervious to chloramphenicol crystalline shall always be worn – Safeskin Purple Nitrile Xtra Exam Gloves, 12 inches long, catalog # 19-149-864 (Fisher Scientific).

- **Lab Coats, etc.**

- Lab coat, closed-toe shoes and long-sleeved clothing shall be worn when handling chloramphenicol crystalline. Protective clothing shall be worn to prevent any possibility of skin contact with chloramphenicol crystalline.
- **Safety Shower / Eye Wash**
 - Where the eyes or body of any person may be exposed to chloramphenicol crystalline, suitable facilities for quick drench or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
 - Bottle type eyewash stations are not acceptable.

Designated Area for Use and Containment Devices

All chloramphenicol crystalline work shall be done in the laboratory fume hood.

The fume hood's sash must be in the position where a face velocity of 100 feet per minute is achieved.

Waste Disposal

Waste chloramphenicol crystalline in low concentration, 20 – 200 micrograms/ml can be drained disposed after it has been autoclaved.

Full containers of chloramphenicol crystalline must be disposed of according to WFUHS EH&S Hazardous Waste Program.

Decontamination of Equipment and Area

Contact WFUHS EH&S at 716-1201 for decontamination information.

Spill and Accident Procedures

In the event of a liquid spill greater than 300cc, immediately vacate and secure the area. Contact WFUBMC Security at 716-9111.