7.02 SOPs 8/04

7.02 STANDARD OPERATING PROCEDURE

Chloroform; CHCl₃ CAS # 000-067-663

HAZARDS:

Health: Irritant (1), toxic (3), possible carcinogen (5)

Inhalation: headache, fatigue, dizziness, dullness, nausea, loss of consciousness, heart arrhythmia, kidney & liver disorders, and death.

Skin and eyes: pain, irritation, defatting.

Ingestion: severe burning of mouth and throat, liver damage, loss of consciousness (>100ml).

Treatment: In case of eye contact, flush with cold water for 15 minutes and get medical attention. In case of skin contact, flush with soap and cold water; apply cream. In case of ingestion, give 3 glasses of milk or water and induce vomiting if conscious and get medical help immediately.

Flammability: none

Incompatibilities: strong bases, high temperature (toxic and corrosive products of decomposition); alcohol increases toxicity.

PROTECTIVE EQUIPMENT: Gloves, fume hood.

USE AND HANDLING PROCEDURES: On GEN4, chloroform is added to phage lysates to complete lysis and to prevent further bacterial growth. On DEV 1 chloroform is mixed with isoamyl alcohol 24:1 for RNA purification. On each day, less than 2 ml/group is used, and it is dispensed under the hood. Use clean tips, and leave used tips under the hood in a beaker.

<u>DISPOSAL:</u> Any pourable quantities must be discarded in a break-resistant screw-cap solvent waste container under the hood ("Chloroform + isoamyl alcohol"); and removed by the Safety Office. May not go down the drain. Residual quantities (i.e. unrecoverable droplets in microfuge tubes and pipet tips) are collected in containers as described above and removed by the Safety Office.

SPILL CLEANUP: If spill is not under the hood, put on a half mask chemical cartridge respirator (in Alcove 1) or self-contained breathing apparatus and ventilate the area; in any case, surround the spill using the contents of the solvent spill kit (in Alcove 1). The absorbed chemical should then be sealed up and removed by the Safety Office as hazardous waste.