

Complete Freund's Adjuvant Standard Operating Procedure

OVERVIEW

- Complete Freund's Adjuvant (CFA) is a mineral oil containing a suspension of whole or pulverized heat-killed mycobacteria which is emulsified together with a solution of the antigen of interest to form a water-in-oil emulsion and is effective in potentiating cellular and humoral antibody responses to injected immunogens.
- It is the responsibility of the Principal Investigator to assure the safe use of CFA by laboratory staff. The PI is responsible for the appropriate training of research personnel for the safe use of CFA.
- Personnel using CFA must be familiar with the [NIH Guidelines for the Research Use of Adjuvants](#).

PREPARATION

- Preparation in a certified fume hood provides the greatest level of protection.
- PPE: Disposable gloves, lab coat, safety glasses/goggles.
- Transportation to ACS spaces should follow [UF's Chemical hygiene plan](#) and be outlined in the laboratory's SOP.

WARNING

Tuberculin-negative individuals have tested positive in subsequent tuberculin tests after accidental CFA exposure.

WASTE

- Liquid waste must be discarded through [EH&S Hazardous Waste Management](#).
- Contaminated solids (PPE, towels, etc.) should be packaged and disposed of as non-regulated solid waste.
- Contaminated sharps must be discarded in a sharps container, closed once 3/4 full, and discarded into a biohazard box.

POTENTIAL SIDE EFFECTS OF NEEDLE PUNCTURES

**Clinical pain
Inflammatory lesions
Abscess formation**

SPILLS

- Evacuate personnel and allow aerosols to settle. Follow the [EH&S guidance for chemical spill clean-up](#). Call [EH&S \(352.392.1591\)](#) for support with large spills.

FIRST AID

- Reference the manufacturer's SDS.

CFA IN ANIMALS

- Administration must be approved in your IACUC protocol.
- Administering CFA to animals presents the greatest exposure risk. CFA becomes less hazardous once it is injected into the animal.
- Once administered, no additional precautions are needed to animal checks and cage changes.