**Fire Suppression Products** 



Ken Jipping, President Dan Jipping, Executive VP

"Best Value in Fire Suppression"

## FIRE CAP PLUS

## SAFETY EVALUATION AND ENVIRONMENTAL CLAIMS SUBSTANTIATION

Fire Cap Plus is a wetting agent manufactured by Fire Suppression Products, Hudsonville, Michigan and is certified by UL for Class A and B fires. The product is an aqueous blend of surfactants and solvents. The labeling contains a number of environmental benefit claims considered by the Federal Trade Commission (FTC) to require substantiation.

Fire Suppression Products retained a third party professional to provide such substantiation. It was judged that the terms "non-toxic, safe, green, eco-friendly" collectively mean that Fire Cap Plus is "non-toxic" which can be defined as not to cause significant adverse effects to health and the environment when used and dispersed as a fire fighting agent.

Several acute toxicity studies were conducted with concentrated Fire Cap Plus. These studies were part of the requirement to comply with NFPA 18 standard for wetting agents. The rat oral and dermal lethal dose (LD-50) exceeded 5000 mg/kg and 2000 mg/kg for the two routes of exposure, respectively. Fire Cap Plus was not a dermal irritant. The product was a moderate eye irritant to rabbits. The effects were reversible. Aquatic toxicity for trout was 64 mg/L and is considered non-toxic when used at its greatest use concentration of 6.0%.

All components in Fire Cap Plus are considered to be high production chemicals by the US EPA. As a result, each chemical has been extensively studied for health and environmental effects by government and industry groups. A review of the scientific literature concluded that none of the components in Fire Cap Plus pose a significant risk to health or the environment and that there are no general concerns for additional work to be conducted. It is therefore concluded that the "non-toxic" claim is substantiated as valid.

The scientific literature review revealed that all the major components are "readily biodegradable". One minor component is "biodegradable" also, but at a slower rate. Therefore the claim of "biodegradable" for Fire Cap Plus is deemed substantiated.

