



AERODAG G AEROSOL RUPTURES

On July 5, 1995, an Aerodag G aerosol can over-pressurized and burst inside a flammable storage cabinet at Pacific Northwest Laboratory (PNL). The bottom of the aerosol can separated, as designed, to release the excess pressure. Staff were protected from injury by virtue of the fact that the product had been stored in a flammable storage cabinet. Minor damage was sustained, however, by other materials stored within the cabinet.

Multiple Aerodag G product compositions have been manufactured over the years. The two most recent compositions used at PNL can be distinguished by the quantity of Volatile Organic Compounds (VOCs) listed on the can label. The aerosol can that over-pressurized contained VOC = 984 grams/liter (g/l). It was produced between March 1991 and October 1994. The company's more recent formulation contains VOC = 649 g/l.

Safety and research staff have not been able to identify the reason for can over-pressurization. Heat was not considered to be a cause, since other cans of the same formulation were subject to the same environmental conditions with no evidence of over-pressurization.

The product manufacturer (Acheson Colloids, Port Huron, Michigan) has not experienced previous problems with this product or container. Follow up with general industry representatives has not indicated a history of these aerosol cans rupturing.

Information obtained from investigation did not provide any substantive data that would indicate this event was anything other than an isolated incident, however, this was not definitive. Given this uncertainty, and the potential for impact on operations, a company-wide decision was made to collect all product from the suspect formulation lot; i.e., marked with VOC = 984 g/l (as identified on the label).

PHYSICS DIVISION STAFF ARE ADVISED TO STORE THIS PRODUCT IN A FLAMMABLE CABINET. IF YOU PREFER TO TURN THE PRODUCT IN FOR DISPOSAL, CONTACT SANDRA KENNEDY AT 6-0240.