



UNITED STATES COAST GUARD

U.S. Department of Homeland Security

MARINE SAFETY ALERT

Inspections and Compliance Directorate

August 8, 1996 (reformatted 2014)
Washington, DC

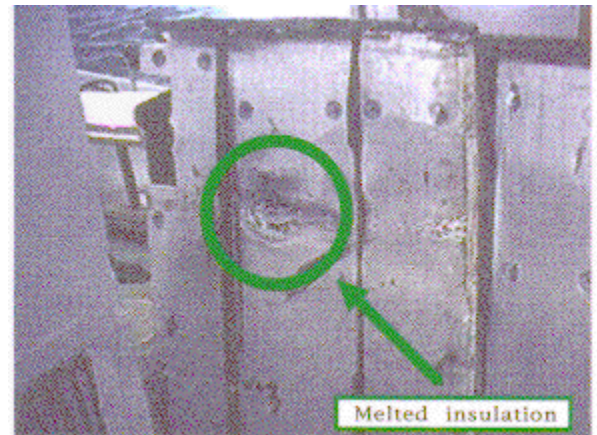
Safety Alert 07-96

FIRE HAZARD OF FOAM INSULATION

On December 1st, 1995 a 50 foot commercial fishing vessel experienced an engine room fire shortly after mooring in Portland, Maine. The original source of the fire was determined to be oily rags and other combustible materials stowed near a heat source (hydraulic day tank and wet exhaust assembly). The combustion of the oily rags, which probably would have remained a minor fire, was found to have quickly spread to extruded polystyrene insulation that had been installed in the engine compartment to reduce noise in the wheelhouse and berthing areas and reduce ice melt in the fish hold.

U.S. Coast Guard personnel have recently observed a number of commercial fishing vessels on which extruded polystyrene insulation (rigid board type insulation) had been installed. Extruded polystyrene insulation, which is typically light blue or pink in color, is extremely flammable, and when ignited, will spread flame rapidly producing large amounts of toxic black smoke. Extruded polystyrene insulation is inappropriate for marine use, especially in areas near potential heat and ignition sources such as galley spaces and engine compartments.

This photograph details a typical use of extruded polystyrene insulation on a commercial fishing vessel. In this application, the insulation has been installed on the engine box cover to reduce engine generated noise. On this vessel the insulation has begun to melt from engine heat. In the event of a high engine temperature or small fire, the insulation could ignite and result in a very rapid flame spread. Vessel operators with similar insulation installations should remove this material as soon as possible. The Coast Guard's primary concern with the use of polystyrene insulation is that a minor fire, which normally could be easily contained, may suddenly result in rapid flame spread and large amounts of black smoke which could disable or trap crew members. Additionally, heat generated by the combustion of polystyrene insulation could ignite other materials, resulting in the loss of a vessel.



All vessel owners and operators are requested to carefully inspect their vessels for this fire hazard. If extruded polystyrene insulation is found onboard your vessel it may present a fire hazard and it should be immediately removed and replaced with insulating materials suitable for high heat locations and marine use. These materials may be marked with USCG approval number 164.009. Although the use of noncombustible materials is not specifically required on commercial fishing vessels, their use is highly recommended. Coast Guard assistance is available to any vessel owner or operator to help determine if fire hazards exist onboard their vessels. For further information contact the U.S. Coast Guard Marine Safety Office at (207) 780 3251 ext 115.

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