

Reference: S012/07
Source: Network Rail

Please Display on all site notice boards

Expanding Foam Aerosol Fatality

Details of Incident

A fatality recently occurred on a Major Contractor's site, when an operative was using a 500ml aerosol can of Evo-Stik expanding foam (see photo) in a new house. It was one of a batch of 3 boxes of 12, each purchased for the task and had just been delivered to site. The operative picked up one of the cans and gave it a shake as recommended on the can.

A pressure explosion occurred when the can burst/exploded at the top seam. The top flew off and hit both the ceiling and a wall leaving surface marks. The bottom section of the can flew out of the operatives' hand and hit him on the chest over the heart. The impact was so severe that the bottom section crumpled and wrinkled to some six inches. Although the severity of the impact neither penetrated his outer clothing or skin, it ruptured his heart causing bleeding to the inside of the heart sack, resulting in his death within several minutes. He was a fit man in his late 20's.

The HSE are involved and have taken all evidence away for examination. At the time they said they had not heard of any similar instances. However it has come to light that these cans have burst although the reasons for this are neither known nor documented. Cans bursting whilst sitting on a shelf in storage have been reported. If stored in direct sunlight or near sources of heat, the material inside the can could expand resulting in a catastrophic failing of the container. The Evo-Stik Data sheet offers no warning against bursting.



Learning Points

All projects / offices must ensure that similar materials are stored and subsequently used correctly. It is imperative that the safety data sheet that is supplied with the product is checked and any explosion risk identified (whether obvious on the data sheet or not) and included within the COSHH Assessment and associated Risk Assessment / Method Statement.

Storage methods and adequacy of associated systems of work should also be checked to ensure that safe use of such products can be assured.