

Accident Profile

Title

Fire of aerosol cans packed in cartons on pallets in a store

Date/Time of Major Occurrence

Start Date 13-07-1999

End Date 13-07-1999

Event Type

Other Event

Reported under

EU Seveso II Directive

Seveso II Status

- not known / not applicable -

Industrial Activity

General engineering, manufacturing and assembly

Reasons for Reporting

- ☐ Substances involved: greater than 5% of quantity in Column 3 of Annex I
- ☒ Injury to persons: >= 1 fatalities, >= 6 hospitalizing injuries, evacuation, shelter-in-place, utility disruption and damage to real estate
- ☐ Immediate damage to the environment (according to Annex VI)
- ☒ Damage to property: on-site >2M €, off-site > 0.5M €;
- ☐ Cross-border damage: transboundary accidents
- ☐ Interesting for lessons learned.

Accident Report

Accident description

Aerosol cans, packed in cartons on pallets in a store, caught fire. The store belongs to a factory in an urban area which prepares this type of product. The store is in the lower basement of the factory. The aerosol cans exploded during the fire, making the firefighting more difficult - a mini-BLEVE. The fire spread very rapidly to all the installation.

Accident involving

- ☐ Domino effects
- ☐ Natech events
- ☐ Transboundary effects
- ☐ Contractors

Site and installation

Site description

not given

Installation/Unit description

The installation concerned is a store of prepared aerosol containers. The presence of material returned by clients should also be noted.

Substances

Substances Involved

The depot contains 33 tonnes of products in aerosol containers. LPG, which is used as propellant in these containers, represents 85% of their contents. The remainder consists of hydrofluoroalkanes.

Substances Classification

08. EXTREMELY FLAMMABLE - note 3(c)

00. NAMED SUBSTANCE

Substances detail

Substance	CAS Number	Quantities (t.)	
		Involved	Potential
hydrofluoroalkanes	CAS Number		
LPG	68476-85-7		

Causes

Two principal causes led to the accident: the immediate cause was a fire (seen by the driver) which started under a fork-lift truck when it passed through the store. This was caused by an aerosol can which had fallen earlier and was crushed, with subsequent ignition of the gas. Moreover, the aerosol cans returned by customers had leaks. The fork-lift truck was not a priori of an appropriate type for this area.

Consequences

One employee and 4 firemen were injured, the firemen while firefighting. Fire-fighting water was contained within the site's retention system, so there was no release to the environment.

Human

On site	Quantity	Quantity/Effect
Injuries	1.00	One employee and 4 firemen were injured
Off site	Quantity	Quantity/Effect
Injuries	4.00	On Site Fatalities: 4

Cost

On site	Cost in Euro	Quantity/Effect
material losses		

Emergency Response

The detection and alarm system worked. About 140 firemen fought the fire for 4 hours. About 100 people were evacuated, since the factory was in an urban area.

Emergency Response	Quantity	Quantity/Effect
On-site systems		fire runoff control

Off-site external services		fire brigade
Sheltering		
Evacuation		
Other		

Remedial Measure	Quantity	Quantity/Effect
Decontamination		
Restoration		
Other		

Lessons Learned

Theme of the Lessons Learned

Other

Lessons Learned

We do not have details of the measures taken on the installation. We will send further information.

Event Profile

Publication Date