

Utsläpp av toluendiisocyanat från en fabrik

Start datum:990507

Händelse kod: DE/1999/006-[01]

Kort rapport

Typ av händelse

Utsläpp av toluendiisocyanat (TDI) från ett polyuretan listverk produktionsfabrik.

Inblandade ämnen

Toluendiisocyanat (TDI) (CAS nr: 91-08-7)

Mängd involverade 450 l.

Olycksobjekt

Den 7 maj 1999 inträffade ett utsläpp av toluendiisocyanat(TDI).

Händelsen har orsakat fel i en roterande skaft olja packning enhet på en (TDI).

Leveranspump mellan smörjkammare och isocyanatpump. Isocyanat pressades in i smörjsystem och släpptes ut från där. Läckagen upptäcktes klockan 17:10.

450 l (TDI) släpptes ut till den. Utsläppet av isocyanat tömdes i en sekundär kontroll fat.

På grund av isocyanat koncentration utrymdes produktion sal och ingången blev säkert.

07.05.1999 a release of toluendiisocyanate (TDI) occurred.

The event was caused by the failure of a rotary shaft oil seal unit on a TDI-delivery pump between the lubrication chamber and isocyanate pumping area. Isocyanate was pushed into the open lubrication system and was released from there.

The leakage was discovered at 17.10 hrs. 450 l TDI had been released up to then. The released isocyanate was contained in a secondary containment basin.

Due to the isocyanate concentrations measured, the production hall was completely evacuated and the entrances were secured.

Olycksorsak

Tekniskt fel (utrustning)

Skador

En person skadades och den materiella skador har beräknats till ca:2000 DM – 1000 EURO och den bortskaffande kostnaden blev ca. 1500 EURO.

Akutåtgärder

Det isocyanat utsläppet raffinerades i en sekundär kontroll bassäng. Den hela byggnaden evakuerades på grund av den isocyanat koncentrationen avpassade och ingången blev säkert.

Erfarenheter

Installationen av ett förseglade smörjolja system på TDI: Leveranspumpen utstyrdes med en nivå indikator. Installationen av en läcka upptäckare nära den TDI - leveranspump och pump- stöd. Inhägnande av TDI - pumpstöd i en hölje Till realiseringen av mätningar sistnämnde, in i loggboken varje timme inspektion omgångens.

English summary

Start date: 07/05/1999

Accident code: DE/1999/006-[01]

Accident type(s)

Release of Toluendiisocyanate (TDI) in a polyurethane moulding production plant.

Substance(s) directly involved

Toluene-2,6-Diisocyanate (TDI) (C.A.S. No: 91-08-7), amount involved 450 l.

Immediate source(s) of accident

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Suspected cause(s)

technical failure (equipment, armatures)

Immediate effects

A staff member suffered from respiratory disturbances and was put under observation by the on-site medical service. Material damages were estimated at ca. 2.000 DM - 1.000 EURO and disposal costs at 3.000 DM - 1500 EURO.

Emergency measures taken

The released isocyanate was retained in a secondary containment basin. The whole building was evacuated due to the isocyanate concentrations measured and the entrances were secured.

Immediate lessons learned

Installation of a sealed lubricating system on the TDI-delivery pump, equipped with a level indicator.

Installation of a leakage detector near the TDI-delivery pump and the pump support.

Enclosing of the TDI-pump support in a casing.

Until realisation of the measures mentioned above, logged hourly inspection rounds.