

Brand på en kemisk fabrik.

941223

MARS 1994_10

mycket kort

Då en reaktor sprack släpptes reaktionsblandningen ut. Reaktionsblandningen bestod av vätgas, bensen och pyroforisk katalysator. Blandningen fattade eld vid kontakt med luft. Produktionen stoppades och branden var släckt efter 45 minuter.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
Bensen	71-43-2	12 ton
Väte	1333-74-0	
Katalysator		

Skador:

Människor: Inga.
Materiella: Skador på anläggningen.
Miljö/ekologi: Inga effekter rapporterade.
Infrastruktur: Inga.

Erfarenheter redovisade (Ja/Nej): Nej

Utredning pågick fortfarande.

Report Profile

Identification of Report:

country: FA ident key: 1994_010_01

reported under Seveso I directive as major accident reports: SHORT+FULL

Date of Major Occurrence: Time of Major Occurrence

start: 1994-12-23 start: 10:00:00

finish: 1994-12-23 finish: 10:45:00

Establishment:

name:

address:

industry: - not applicable -

Chemical Industry

Seveso II status: not applicable: Yes art. 6 (notification): No

art. 7 (MAPP): No

art. 9 (safety report): No

Date of Report:

short: full:

Authority Reporting:

name:

address:

Authority Contact:

rep_cont_name:

rep_cont_phone:

rep_cont_fax:

Additional Comments:

a) - not applicable -

b) - not applicable -

c) - not applicable -

d) - not applicable -

e) - not applicable -

Short Report

country: FA ident key: 1994_010_01

Accident Types:

release: Yes explosion: No

water contamination: No other: No

fire: Yes

description:

A rupture of the reactor made that the hydrogen, petroleum products and the pyrophoric katalysator came outside the reactor. The mixture immediately caught fire in the air.

Substance(s) Directly Involved:

toxic: Yes explosive: No

ecotoxic: No other: No

flammable: Yes

description:

Benzene 12 ton

Hydrogen

Katalysator

Immediate Sources of Accident:

storage: No transfer: No

process: Yes other: No

description:

- not applicable -

Suspected Causes:

plant or equipment: Yes environmental: No

human: No other: No

description:

Still under investigation. Cause not yet fully understood.

Immediate Effects:

material loss: Yes

human deaths: No

human injuries: No **community disruption:** No

other: No

ecological harm: No

national heritage loss: No

description:

- No personal injuries.... see Appendix Short Report / description of immediate effects

Emergency Measures taken:

on-site systems: Yes **decontamination:** No

external services: No **restoration:** No

sheltering: No **other:** No

evacuation: No

description:

On site emergency organisation has to come in action.

Immediate Lessons Learned:

prevention: No **other:** No

mitigation: No

description:

Investigation is still going on.

A Occurrence Full Report

country: FA **ident key:** 1994_010_01

1 Type of Accident

remarks: - not applicable -

2 Dangerous Substances

remarks: - not applicable -

3 Source of Accident

illustration: - not applicable -

remarks: - not applicable -

4 Meteorological Conditions

precipitation none: fog: rain: hail: snow:

Yes No No No No

wind speed (m/s):

direction (from):

stability (Pasquill):

ambient temperature (°C): 2

remarks: - not applicable -

5 Causes of Major Occurrence

main causes

technical / physical - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

human / organizational - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: - not applicable -

6 Discussion about the Occurrence

- not applicable -

Dangerous substances

country: FA **ident key:** 1994_010_01

a) total establishment inventory

CAS number: identity: Hydrogen

name from Seveso I Directive: - not applicable -

name from Seveso II Directive: - not applicable -

category from Seveso II: - not applicable -

other hazards (1): - not applicable -

other hazards (2): - not applicable -

maximum quantity (tonnes): -1

use of substance as: STARTING MATERIAL

b) substance belongs to relevant inventory directly involved: No

actual quantity: -1 **potential quantity:** -1

c) substance belongs to relevant inventory indirectly involved: Yes

actual quantity: -1 **indir_pot_quant:** -1

a) total establishment inventory

CAS number: identity: Catalyst

name from Seveso I Directive: - not applicable -

name from Seveso II Directive: - not applicable -

category from Seveso II: - not applicable -

other hazards (1): - not applicable -

other hazards (2): - not applicable -

maximum quantity (tonnes): -1

use of substance as: STARTING MATERIAL

b) substance belongs to relevant inventory directly involved: No

actual quantity: -1 **potential quantity:** -1

c) substance belongs to relevant inventory indirectly involved: Yes

actual quantity: -1 indir_pot_quant: -1

a) total establishment inventory

CAS number: identity: Benzene

name from Seveso I Directive: - not applicable -

name from Seveso II Directive: - not applicable -

category from Seveso II: - not applicable -

other hazards (1): - not applicable -

other hazards (2): - not applicable -

maximum quantity (tonnes): 12

use of substance as: STARTING MATERIAL

b) substance belongs to relevant inventory directly involved: No

actual quantity: -1 potential quantity: -1

c) substance belongs to relevant inventory indirectly involved: Yes

actual quantity: -1 indir_pot_quant: 12

B Consequences Full Report

country: FA ident key: 1994_010_01

1 Area concerned

affected

extent of effects installation: not applicable

establishment: not applicable

off-site; local: not applicable

off-site; regional: not applicable

off-site; transboundary: not applicable

illustration of effects - not applicable -

remarks - not applicable -

2 People

establishment popul. emergency personnel off-site population

total at risk 100

immediate fatalities 0 0 0

subsequent fatalities 0 0 0

hospitalizing injuries

other serious injuries

health monitoring

remarks - not applicable -

3 Ecological Harm

pollution/contamination/damage of:

- residential area (covered by toxic cloud) Suspected
 - common wild flora/fauna (death or elimination) Suspected
 - rare or protected flora/fauna (death or elimination) Suspected
 - water catchment areas and supplies for consumption or recreation Suspected
 - land (with known potential for long term ecological harm or Suspected preventing human access or activities)
 - marine or fresh water habitat Suspected
 - areas of high conservation value or given special protection Suspected
- remarks - not applicable -

4 National Heritage Loss

effects on:

- historical sites Suspected - historic monuments Suspected
- historic buildings Suspected - art treasures Suspected

remarks - not applicable -

5 Material Loss

establishment losses off site losses

costs (direct costs to operator) (social costs)

in ECU ECU

material losses

response, clean up, restoration

remarks - not applicable -

6 Disruption of Community Life

establishment/plant evacuated disabled/unoccupiable destroyed

- nearby residences/hotels No No No
- nearby factories/offices/small shops No No No
- schools, hospitals, institutions No No No
- other places of public assembly No No No

interruption of utilities etc. no / yes duration

- gas No
- electricity No
- water No
- sewage treatment works No
- telecommunications No
- main roads No
- railways No
- waterways No
- air transport No

significant public concern none local level national level

- **off site populations** Yes No No

- **media interest** Yes No No

- **political interest** Yes No No

remarks - not applicable -

7 Discussion of Consequences

- not applicable -

C Response Full Report

country: FA ident key: 1994_010_01

1 Emergency Measures

taken - on site - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

- **off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

still - on site - not applicable - - not applicable -

required

- not applicable - - not applicable -

- not applicable - - not applicable -

- **off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

continuing contamination or danger

-**on site** not applicable

-**off site** not applicable

remarks - not applicable -

2 Seveso II Duties

pre-accident evaluation

Article item not due yet not done done/submitted evaluated

6 **notification** No No No No

7 **policy (MAPP)** No No No No

9 **safety report** No No No No

9, 10, 11 **update** No No No No

11 **internal plan** No No No No

11 **external plan** No No No No

13 **informing public** No No No No

9, 12 **siting policy** No No No No

post-accident evaluation

Seveso II duty was actual were actual compared with actual

contingency consequences consequences, the

addressed? addressed? predicted extent was?

Article item

7 policy (MAPP) not applicable not applicable not applicable

9 current safety report not applicable not applicable not applicable

11 internal plan not applicable not applicable not applicable

11 external plan not applicable not applicable not applicable

13 informing public not applicable not applicable not applicable

9, 12 siting policy not applicable not applicable not applicable

evaluation of safety organisation

organisational element element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- written policy objectives No

- specified management No

structure

- specified responsibilities No

- specified working procedures No

- specified procedures for No

assessment/auditing of

management system

- specified procedures for No

review and update of

management policy

- specified general training No

procedures

- specified emergency No

training procedures

evaluation of ecological impact control

organisational element element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- ecological status review No

before incident

- potential ecological No

consequences assessment

- ecological impact review No

after incident

- ecological restoration No

procedures

- subsequent review of No

restoration success

remarks - not applicable -

3 Official Action Taken

legal action

- not applicable -

other official action

- not applicable -

4 Lessons Learned

measures to prevent recurrence

- not applicable -

measures to mitigate consequences:

- not applicable -

useful references:

- not applicable -

5 Discussion about Response

- not applicable -

Appendices for the FA / 1994_010_01 report

Appendix Short Report / description of immediate effects:

- No personal injuries.
- Fire extinguished after 45 minutes.
- Damage of the installation.
- Production stopped.