

PUBLIC INFORMATION BULLETIN
2015



KYMPE

KYMENLAAKSO RESCUE DEPARTMENT

SAFETY INFORMATION BULLETIN FOR MAJOR ACCIDENT

For the residents of the Hamina region

This safety information bulletin required by the EU's Seveso Directive describes:

- what kinds of leak and emission hazards there are in our area
- whether your home or workplace is located in the area of a potential accident risk
- how the residents are alerted in different situations
- what to do in the event of a major accident
- when and where information is available.

Safety information bulletin also on the Internet:

www.kympe.fi

Read the safety information
bulletin frequently enough
and keep it in a place where
it can be found easily!



SAFE TOMORROW THROUGH CO-OPERATION

The Kymenlaakso Rescue Department uses this information bulletin distributed to all households to confirm that the emergency plans required by the EU's Seveso III Directive are up-to-date in Kymenlaakso. The name of the Seveso Directive comes from the disastrous industrial chemical accident in Italy in 1976, after which legislation in Europe has focused in particular on the prevention of the risks of major accidents.

The decree of the Finnish Ministry of the Interior on an external emergency plan of sites causing special risk (612/2015) and the Government decree of the handling of dangerous chemicals and supervision of their storage have been complied with in the drawing up of this information bulletin. The bulletin contains the key information on external emergency plans, and it is always available on the website of the Kymenlaakso Rescue Department. The bulletin takes into account the obligation of preparedness for major accidents prescribed by the Finnish Rescue Act and the requirement of an external emergency plan required by the Act. This requirement also covers the transport of dangerous goods and their temporary storage in railway yards and ports.

The residents of our region must have appropriate information about chemical operators in our area, and the residents must be able to prepare themselves for those accident impacts that may extend beyond the area of an operator. The companies that handle chemicals in Kymenlaakso have compiled this safety information bulletin in co-operation with the Kymenlaakso Rescue Department.

The possibility of serious accidents can never be ruled out. This is why there must be **careful advance preparations** for the accidents.

We encourage you to familiarise yourself with the content of this safety information bulletin. This bulletin describes whether your home or workplace is within the impacts of a potential accident, and gives instructions for a major accident.

The companies in our region have identified the risks of a major accident related to the chemicals (substances and mixtures) stored and used, and the companies do their best to prevent accidents and limit their consequences. Technical measures and careful use of the equipment aim to ensure that there is no serious risk to people or the environment as a result of the operations. The high level of the professional skills of the personnel, effective control and continuous maintenance of the equipment are the key issues. The companies organise regular training in safety issues.

The Kymenlaakso Rescue Department together with the operators confirms that the production plants covered by this information bulletin comply with the provisions of the Chemical Safety Act and of the decree on the handling and storage supervision of dangerous chemicals as well as regulatory orders, and that the prescribed permit applications and safety reports have been submitted to the Finnish Safety and Chemicals Agency.

Operators who are obliged to draw up a safety report also confirm their obligation to take appropriate action in the area and in particular to contact the Rescue Department in order to act properly in major accidents and to minimise their consequences.

The Finnish Safety and Chemicals Agency (Tukes) is the highest authorising authority in Finland with regard to the IMO fields of chemical railway yards and ports of companies and of the Finnish Transport Safety Agency (Trafi), with Tukes overseeing the operations together with other authorities. In addition, the companies themselves continuously evaluate their environmental, health and safety risks.

However, not all can be controlled and anticipated. Natural phenomena can cause unexpected damage and consequences, as can equipment failures or human action. It is our common goal that people can act as wisely as possible in the event of an accident to avoid or minimise the damage.



Ilpo Tolonen
Rescue Manager



WHO IS RESPONSIBLE FOR RESCUE OPERATIONS?

The Kymenlaakso Rescue Department (KYMPE) is responsible for rescue operations in Kymenlaakso.

Kymenlaakso Rescue Department:

- takes care of the tasks related to rescue operations
- takes care of warning the population in case of danger and accidents
- takes care of the supervisory duties in rescue services by carrying out fire inspections and other measures required by the supervisory duties
- takes care of education and counselling concerning rescue services
- maintains readiness for civil defence in the manner laid down in the Rescue Act
- is responsible for response to land oil accidents and vessel oil accidents
- co-ordinates the tasks of the various authorities and other parties involved in rescue operations.

The Seveso III Directive requires that those companies whose operations may cause a special risk of a major accident must prepare and submit a safety report to the Finnish Safety and Chemicals Agency. These reports must be submitted to the Rescue Department for the drawing up of an external emergency plan.

The safety reports of companies obliged to draw up such report can be found in the offices of companies marked in this bulletin with a red square ■. The offices of the companies also have the date of the most recent inspection of the production plant and information on the inspection and on the inspection programme concerning the production plant. If this information is available at the production plant in an electronic format, this is mentioned in connection with the production plant in this information bulletin.

All companies included in this information bulletin have delivered their internal emergency plans to the Kymenlaakso Rescue Department.

The Kymenlaakso Rescue Department has prepared the external emergency plans and keeps them up to date. The external emergency plan describes how the rescue operations are managed outside the production plant in the event of a major accident. A major accident is one where the rescue operations cannot be managed by the internal and local resources of a company or plant.



**The instructions
for a major accident
are on the back page!**

The Rescue Department organises major accident exercises every three years in co-operation with the other authorities obliged to contribute to rescue operations.

The rescue plans for this area are available to the residents at the Hamina Fire Station, Vehkapolku 1, 49420 Hamina.



KYMPE

Further information
during office hours

Rescue Manager
Ilpo Tolonen (05) 231 6213

Fire Engineer
Juhani Carlson (05) 231 6331

etunimi.sukunimi@kympe.fi
www.kympe.fi

COMPANIES AND THEIR OPERATIONS

IN THE PORT, RAILWAY AND INDUSTRIAL AREAS OF HAMINA

The following pages present the operations of companies that handle chemicals or gases classified as dangerous as well as company-specific situations where a risk of accident can arise in the port, railway and industrial areas of Hamina.

Liquid raw materials are brought into warehouses by railway waggons, road transport or ships. The chemicals are stored in tanks specifically constructed for them. The tanks are located in protective basins or protective embankments. The finished products are taken from the warehouses by sea, rail and road.

The rescue guidelines (TOKEVA) of the rescue services define the accident situations caused by dangerous substances as well as **the limits within which the area must be isolated and the limits within which the public must be warned**. These limits are also shown on the map on pages 10 - 11.



ISOLATION LIMIT = limit within which a 30-minute stay outdoors without breathing protection can cause permanent or serious health impacts or symptoms that make it difficult to leave the area.



WARNING LIMIT = limit within which a 30-minute stay outdoors without breathing protection can cause temporary health hazards. However, the symptoms potentially caused by gas do not make it difficult to leave the area.

Identify
chemicals
and gases,
page 8

Fire is possible everywhere, and the combustion gases formed in a fire are always toxic. The size of the area to be isolated below wind can be hundreds of metres, even several kilometres.

A **natural gas pipeline** runs throughout Kymenlaakso. In case of leak of natural gas, the ignition risk is in the immediate vicinity of the point of leak. If a fire breaks out at the point of leak, the impact of the accident can extend over hundreds of metres depending on the diameter of the pipe. Outside factory areas, the natural gas pipeline is clearly marked.

In addition to material damage and hazards to people, **environmental impacts** occur in almost all accident situations. However, these impacts are not detailed in this summary. Information on the environmental impacts of different chemicals is available in the OVA guidelines at: <http://www.ttl.fi/ova>

■ The red squares in this information bulletin indicate those companies whose activities may cause a particular risk of major accidents and from which the Finnish decree on the industrial handling and storage of dangerous chemicals, drawn up in accordance with the relevant EU directive, requires a safety report. These companies have delivered the necessary safety report and chemical list to the Finnish Safety and Chemicals Agency (Tukes). The reports and lists are also available to the residents at the offices of the relevant companies. Other companies do not have this obligation.



INDUSTRIAL OPERATORS



Kaasusatamantie 6

BASF Oy manufactures styrene butadiene latexes and styrene acrylate latexes. The production process works as a batch process, and the product is produced in a reactor under carefully controlled conditions. The factory area is used for handling substances such as butadiene, styrene, butyl acrylate and acrylonitrile.

Potential hazards:

Gaseous or liquid leaks may be caused by potential leaks in the transfer piping of acrylonitrile, butadiene, butyl acrylate or styrene. The combustion gases caused by fires at the production plant or in the transfer piping of chemicals are partially toxic and harmful.

The dangerous area, within which butadiene may explode, is 30 to 40 metres from the point of leak. The dangerous area, within which acrylonitrile may explode or ignite, is about 5 metres from the point of leak. The limit, within which acrylonitrile can cause damage to human health, is 900 metres.

Further information on the operations:
Site Manager Pekka Puttonen, tel. 050 512 3462



Öljysatamantie 16

Prefere Resins Finland Oy manufactures formaldehyde, adhesive resins and hardeners for the mechanical wood-processing industry, insulation wool industry and paper industry. The factory area is used for storing and processing substances such as formalin, phenol, urea, melamine, methanol as well as various acids and bases.

Potential hazards:

The escape of the phenolic resin reaction may result in a thermal explosion where the pressure wave and flying objects pose a danger to the environment. A fire in the methanol storage tank or in the pond surrounding it may cause an explosion as a result of static electricity, lightning, careless handling of fire or the like. People may be injured and serious environmental damage can occur in a potential explosion.

The harmful concentration (htp 15min) of a large methanol pond can extend to 600 metres in favourable conditions.

Further information on the operations:
Site Manager Merja Porkka, tel. 050 385 2363



ENGINEERED
MATERIALS
J. M. Huber Finland Oy

Telakkatie 5

J.M. Huber Finland Oy's Hamina production plant manufactures inorganic silica and aluminium silicate pigments by precipitating sodium silicate with either sulfuric acid or aluminium sulphate. The products are either dry or slurries and are used by the paper, toothpaste and food industries.

Potential hazards:

Fire at the factory may cause chemical hazards.
The products manufactured are non-combustible.

Further information on the operations:
Development Manager Olli Järvenkylä, tel. 020 791 3626



STR TECOIL

Paksuniementie 15-17

STR Recoil Oy handles used lubricating and hydraulic oils and vessel-based oils to produce base oil for lubricating oil. The by-products of the regeneration process are light fuel oil and bitumen. Lye, hydrogen peroxide and hydrogen, among others, are used in the plant area. All the tanks are placed in protective basins.

Potential hazards:

High-risk hazards are related to an uncontrolled fire and to the maintenance of the plant during its operation, when, for example, incomplete nitriding or its absence may cause a hydrogen explosion.

A leakage of the nitrogen vapourisation system can cause a nitrogen cloud at a distance of less than 100 metres.

Further information on the operations:
Technical Manager Mika Pöyry, tel. 040 551 3463



TRINSEO™

Palokankaantie 1

Trinseo Suomi Oy manufactures styrene butadiene latexes and styrene acrylate latexes. The factory area is used for handling substances such as butadiene, styrene, butyl acrylate and acrylonitrile.

Potential hazards:

Gaseous emissions can be caused for example during disturbances in the reactor or other process equipment, in the leaks of tanks and in the leaks of the transfer pipe of liquefied butadiene or styrene.

Dangerous areas:

Butadiene may explode within 30 to 40 metres from the point of leak. Acrylonitrile may explode or ignite within about 5 metres from the point of leak. The warning limit, within which acrylonitrile can cause damage to human health, is 900 metres.

Further information on the operations:
Site Manager Paavo Rönkkö, tel. (05) 730 2410



Terminaalitie 4

St1 Biofuels Oy's Hamina production plant manufactures bioethanol products, and stores, loads and unloads liquid hydrocarbons.

Potential hazards:

A fire in the tanks, in their embankment or at a truck loading station can spread to the neighbouring companies.

Further information on the operations:
Production Manager Mika Jokinen, tel. 0400 468 151

WAREHOUSING



BALTIC TANK Terminaalitie 5

Baltic Tank Oy unloads, stores and loads liquid oil products and chemicals.

Potential hazards:

A fire in a tank, in an embankment or at the loading station may spread.

The harmful concentration (htp 15min) of a large methanol pond can extend to 600 metres in favourable conditions.

Further information on the operations:
Terminal Manager Olli-Pekka Kontunen, tel. 040 680 3076

NEOT

North European Oil Trade

Öljysatamantie 7

North European Oil Trade Oy stores, unloads and loads liquid oil and chemical products.

Potential hazards:

A large-scale leakage of chemicals in conjunction with the unloading of rail waggons, ship loading or other operations may cause a risk of accident. A fire in a tank, embankment area or at the loading/unloading sites may threaten neighbouring companies. A leakage of acrylonitrile to the embankment may lead to vaporisation and fire. Vapour that is heavier than air may ignite tens of metres from the point of leak.

The warning limit for acrylonitrile is 900 metres.

Further information on the safety report and chemical list:
Terminal Manager Harri Metsola, tel. 045 805 7278



FINNGAS

Kaasusatamantie 3

FGG Finngas GmbH uses pressurised tanks to handle and store flammable, non-scented liquid gases and light flammable liquid hydrocarbons that are partially hazardous to health.

Potential hazards:

Emission of liquid gas (butane, propane, butadiene). In an emission of almost 3 hours (approx. 20 tonnes, i.e. one rail waggon), the ignition hazard area is about 100 metres from the point of leak.

An instantaneous emission of about 100 tonnes may result from the tearing of a storage tank and cause a risk of ignition over a distance of 600 metres. A gas emission may result in an explosion or fire, which may cause loss of life and significant material damage within or also outside the terminal area.

At worst, an accident at the unloading and loading station of trucks or railway waggons may result in a fire and a consequent BLEVE explosion, where the resulting throw-out can reach up to a distance of 600 metres.

Further information on the safety report and chemical list:
Manager Vesa Vahtera, tel. (05) 755 1100



HEXION™

Öljysatamantie 17

A storage and loading area for dangerous chemicals is located within Hexion Oy's area. The storage tanks are placed in protective basins made of concrete. The terminal has been built in a port area filled with blasted stone. The area has been leased for the time being. The chemicals stored vary depending on the tenants' needs.

Potential hazards:

The biggest identified risk is the potential leakage of flammable liquid into the protective basin and an associated fire in the basin. The radiation heat from a fire can cause danger in the neighbours' storage areas. Other potential accidents are less severe in terms of their consequences.

The size of the warning limit varies depending on the chemical stored; for example with methanol it is 600 metres.

Further information on the safety report and chemical list:
Site Manager Pasi Rouvinen, tel. 040 840 4237

Neste Oil Oyj's Hamina terminal is engaged in the rail unloading, storage and loading of oil products and chemicals to tanker trucks, rail waggons and tanker ships.

Potential hazards:

The direct impacts of potential major accidents may extend to the immediate neighbourhood, where the maximum number of simultaneously exposed persons is estimated to be 50.

The combustion gases of a large-scale fire may spread to the railway yard and, depending on the wind, to the centre of Hamina or out to the sea. A large-scale chemical leakage from a tank can cause over-flooding of the oil separation basin and a consequent oil spill in its environment. The access of oil to the sea can be prevented by closing the valves in the drainage pipe leading to the safety reservoir.

In ship operations, the impacts of major accidents can be directed to the quay area, the sea or the shoreline, depending on the type of accident. Imaginable major accidents can include a significant oil spill and a fire or explosion on a ship.

Imaginable major accidents in rail waggon unloading can include a bad train crash, a fire or explosion in a tank waggon and a significant oil spill to the ground.

Further information on the safety report and chemical list: Terminal Manager Meri Arvilommi, tel. 010 4581 501

Oy Teboil Ab's Hamina terminal stores, loads and unloads petrols, naphtha, diesel oils, heavy fuel oils, base oils, lubricating oils and additives.

The products are brought to the terminal by ships, tanker trucks and rail tank waggons. Transport and heating fuels are mainly delivered to the customers by tanker trucks.

Potential hazards:

Leak or fire at the truck loading station. A fire in a tank, in the embankment of the tanks or at the railway waggon unloading station may spread to the area of the neighbouring company. Storage 2 is used for permanently storing relatively large volumes of 95-octane petrol. The neighbouring company Vopak stores large volumes of methanol. Smoke generated by fire may spread hundreds of metres or even several kilometres depending on the weather and wind conditions.

Leakage due to the breakage of a ship loading arm can cause a fire on a ship or serious environmental damage.

Further information on the safety report and chemical list: Terminal Manager Harri Karjarinta, tel. 040 6300 978

Vopak Chemicals Logistics Finland stores chemicals such as benzene, methanol, orthoxylene, paraxylene and aviation petrol. The company also has a permit to process and store phenol.

Potential hazards:

A fire in the leak basin of the rail waggon unloading track can spread to the neighbouring companies and to waggons on the track. An explosion of an empty or nearly empty methanol storage tank would also cause serious damage to the neighbouring companies. The harmful concentration (htp 15min) of a large methanol pond can extend to 600 metres in favourable conditions.

Further information on the safety report and chemical list: SHEQ Engineer Harri Luukkanen, tel. (05) 226 9200



Hamina Energy stores liquefied petroleum gas (propane) at address Soihtutie 2, and is now a MAPP plant. According to plans, Hamina Energy will store at its terminal 30,000 tonnes of liquefied natural gas (LNG) liquefied by cooling from 2018 onwards. The storage will be located in the area between the oil quays 1 and 3. The area will be made-up ground.

(2018) Potential hazards:

The dangerous area (thermal radiation and pressure effect) of LNG is estimated to be within a radius of 200 metres from the ship unloading functions.

Further information on the operations: Director of Energy Business Janne Ristola, tel. 040 1677 294

LOGISTICS

VR Transpoint carries dangerous chemicals by rail to the Poitsila railway yard, from where the chemicals are transferred as soon as possible to the storage and unloading tracks of individual companies.

Potential hazards:

There is a risk of a major accident only in major leakage, accident or fire situations.

The size of the warning limit varies according to the substance transported; for example with butadiene it is 500 metres and with acrylonitrile 900 metres.

Further information on the operations: Service Manager Hannu Repo, tel. 040 8634 601 Safety Advisor Arto Ojala, tel. 040 8634 237

IDENTIFY CHEMICALS AND GASES

The port and industrial area in Hamina is used for storing and handling and the railways are used for carrying the following extremely flammable, harmful, irritating and toxic chemicals and gases which are also dangerous to the environment. The transport of dangerous goods is marked with warning labels and identification numbers. Based on these, the authorities identify the substance transported.

This list indicates the most essential hazards of the substance by means of the labels in accordance with the EC Regulation No. 1272/2008:



acutely toxic



acutely toxic, inducing skin, eye or respiratory tract irritation, narcotic, skin sensitisers



carcinogenic, mutagenic, toxic to reproduction, causing damage to organs, respiratory tract sensitisers



explosives



highly flammable



oxidising



corrosive, causing serious eye damage

































hazardous to (aquatic) environment



gas under pressure

SUBSTANCE	IDENTIFIERS	IMPACTS
Acrylonitrile 	Liquid: colourless, mobile, volatile, lighter than water, can become yellowish in light. Vapours: heavier than air, sweetish, pungent, pyridine or onion- type odour. The odour does not warn of the health hazard.	Highly flammable, vapours very susceptible to ignition. Polymerises very easily under the influence of heat, light or bases, and the reaction may cause an explosion. Toxic on the skin and if swallowed and inhaled. Life-threatening in high concentrations. Dangerous to the environment, may cause long-term adverse effects in the aquatic environment.
Ammonia 	Gas: colourless, strongly pungent odour. Can be liquefied easily to become a colourless liquid.	May form an explosive mixture with air. Reacts violently. Develops heat with acids and oxidants. Toxic by inhalation, very irritating to the respiratory tract, eyes and skin. Corrodes mucous membranes and retinas. Toxic to aquatic organisms.
Benzene 	Liquid: clear, colourless, lighter than water, aromatic odour. Vapour: heavier than air.	Highly flammable. Toxic on the skin and if swallowed and inhaled. In high concentrations, may cause loss of consciousness or loss of life (20,000 ppm / 2 vol%).
Butane 	Gas: colourless, invisible, almost odourless, heavier than air.	Extremely flammable. Suffocating in high concentrations.
Butadiene 	Gas: colourless, mildly aromatic odour.	Extremely flammable. Toxic, long-term exposure causes a risk of cancer. In high concentrations, irritates the upper respiratory tract and causes slight eye irritation, blurred vision and distortion of sensations.
Butyl acrylate 	Liquid: colourless, pungent odour.	Extremely volatile, flammable. Irritating to the eyes, skin and respiratory system.
Phenol 	Solid in rail waggons and molten at 50 to 55° C in tanker trucks: at normal temperature colourless, pungent odour, turns reddish by the effect of air and light. Vapours: heavier than air.	Strong oxidising acids can cause an explosion with phenol. Calcium hypochlorite reacts with phenol, releasing heat and toxic flammable vapours. Isocyanates cause violent polymerisation and heat generation with phenol. Corrosive. Toxic on the skin and if swallowed. Vapours cause nausea, dizziness and headache. High concentrations may cause liver and kidney damage. Large splashes on the skin (400 cm2) can cause death. Toxic to aquatic organisms.
Formalin 	Liquid: colourless, formaldehyde content not exceeding 55%.	Corrosive, toxic by inhalation, ingestion and on the skin, also sensitisation. Risk of severe permanent damage as a result of long-term exposure. Suspected of causing cancer. Harmful to aquatic organisms.
Oxygen, liquefied 	Liquid: bluish, odourless, tasteless, very cold.	Accelerates combustion, reacts easily with fats, oils and flammable materials. Symptoms resembling burns on the skin, risk of serious eye damage.
Fireworks containers 	Fireworks in solid state, packed and labelled with warnings.	In a fire, fireworks in a metallic transport container may cause a mass explosion.

SUBSTANCE	IDENTIFIERS	IMPACTS
LNG (liquefied natural gas)  	Liquid -162 °C. Gas: odourless and colourless, lighter than air. Natural gas can be scented.	Extremely flammable. High concentrations displace oxygen, resulting in a risk of suffocation. May cause severe frostbites on the skin or eyes.
Natural gas 	Gas: scented for consumer use	Extremely flammable. High concentrations displace oxygen, resulting in a risk of suffocation. Frostbites are also possible.
Methanol   	Liquid: colourless, clear, mild alcohol odour.	Highly flammable, explosive when gaseous. Vapours in low concentrations cause headache, fatigue and dizziness. Causes a risk of very serious, permanent damage by inhalation, skin contact and ingestion. Very small swallowed doses may cause death (80 - 150 millilitres) or blindness (4 millilitres).
Motor petrol   	Liquid: yellowish, aromatic and ethereal odour.	Extremely flammable. Toxic, causes a risk of cancer. Environmentally hazardous due to toxicity to aquatic organisms and poor degradation. Additive MTBE is harmful to groundwater.
MTBE  	Methyl-tertiary-butyl-ether. Liquid: clear, mobile. Strong ethereal characteristic odour.	Highly flammable liquid. Volatile. The vapour is heavier than air and can form an explosive mixture with air. Irritating to the skin. Not biodegradable. Toxic to groundwater.
Sodium hydroxide (caustic soda) 	In solid state white, odourless and non-volatile, or liquid lye.	May react strongly with many substances generating so much heat that the nearby combustible materials will ignite. When diluted with water, so much heat may be generated that the solution begins to boil. Corrodes metals such as zinc, magnesium and aluminium, releasing flammable hydrogen gas. Dust and dilute solution irritate the respiratory tract. Strong solution is corrosive and causes ulcerations. Risk of shock in the abdomen, risk of loss of eyesight in the eyes. A solution of less than 50% can migrate and dissolve various detrimental substances from the soil to groundwater. Harmful to aquatic organisms.
Propane 	Colourless and invisible when gaseous, almost odourless.	Extremely flammable. Suffocating in high concentrations.
Sulphur dioxide  	Colourless when gaseous, pungent smell.	Toxic and corrosive by inhalation, irritating to the eyes and respiratory organs, life-threatening in high concentrations. Harmful to aquatic organisms.
Sulfuric acid 	Liquid: colourless or brownish colour, odourless or slightly pungent odour, oily. A strong acid that generates heat when dissolved into water.	Reacts violently with water and several metals. Corrodes quickly aluminium, copper and alloys containing these. Flammable gas may be created in a reaction with metal. Organic substances such as paper and cotton may ignite by the effect of sulphuric acid.
Hydrogen sulphide   	Gas: colourless, strong smell of rotten egg	Leakage causes a risk of ignition outdoors and a risk of explosion indoors. A mixture of hydrogen sulphide and air can ignite anywhere. Reacts violently with strong oxidants and metal oxides and may ignite by itself. In a hot environment, hydrogen sulphide disintegrates into hydrogen and sulphur. The combustion and decomposition products are toxic. Dangerous to the environment. Very toxic to aquatic organisms.
Styrene  	Liquid: colourless, syrupy, volatile, pungent odour. Vapours: heavier than air.	Flammable, combustion products are carbon dioxide and toxic carbon monoxide. Harmful by inhalation, irritating to the eyes and skin. Corrodes copper, may react violently with oxidants and strong acids. May polymerise by heat, light and peroxides, resulting in an explosion hazard. Toxic to aquatic organisms, may migrate to groundwater.
Toluene   	Liquid: colourless, sweetish and slightly pungent odour, benzene-like.	Highly flammable, corrodes some plastics and rubber, not metal. Harmful by inhalation. Toxic to aquatic organisms, may migrate to groundwater.
Hydrogen peroxide   	Liquid: odourless, tasteless, strongly foaming, steaming.	Strongly oxidising, does not burn but accelerates and maintains combustion. Disintegrates into water and oxygen forming heat that can ignite a burning material. Corrosive, irritating to the eyes, skin and respiratory organs. Toxic to aquatic organisms.
Vinyl acetate 	Liquid: colourless, odour is pleasantly fruity, ethereal, but the sensation quickly becomes pungent and irritating.	Highly flammable, vapours highly volatile. Can react in an explosion with hydrogen peroxides or oxygen and form an explosive mixture with vinyl acetate ozone and ozone. Harmful to aquatic organisms.
Hydrogen  	Colourless and odourless	Extremely flammable gas.



KYMPE

KYMENLAAKSON PELASTUSLAITOS

The map can be enlarged
to show more details:
www.kympe.fi

Summa

- Trinseo Suomi Oy

- STR Tecoil Oy

- Oy Teboil Ab
- Neste Oil Oyj
- Vopak Chemicals Logistics Finland Oy
- Prefere Resins Finland Oy

- BASF Oy
- FGG Finngas GmbH

- NEOT Oy
- Baltic Tank Oy
- St1 Biofuels Oy
- Hexion Oy

- Haminan Energia LNG



High-power alarm device / coverage area



Attainability area of rescue services - 10 min

Company-specific warning limits:



isolation limit



warning limit



INSTRUCTIONS FOR A MAJOR ACCIDENT

Everyone in the region must comply with the instructions and regulations given by the authorities in the event of an accident.

An accident is notified by means of the GENERAL DANGER SIGNAL.



This is a one-minute rising and descending sound signal, which is REPEATED SEVERAL TIMES IN A REAL SITUATION.

A danger bulletin is always associated with a general danger signal. The danger bulletin is read on all radio channels and displayed on teletext page 112 of YLE, MTV3 and Nelonen as well as in television programmes as a text ribbon running at the top of the screen.

If necessary, loudspeaker vehicles are also used.

ALL CLEAR SIGNAL

A continuous steady sound signal with a duration of ONE MINUTE.

TRIAL SIGNAL

is a steady sound signal of 7 seconds. There can be a rising section at the beginning and a descending section at the end. The trial signal is heard in Kymenlaakso on the FIRST MONDAY (weekday) OF EACH MONTH AT 12.00 NOON.

Moreover, the rescue authority and industrial plants in the region test their alarm systems regionally by using the trial signal.

IF YOU ARE INDOORS



- 1 Close the doors, windows and stop air conditioning.



- 2 Switch on the radio or television and follow the instructions given.



- 3 Use the telephone only if you are in need of immediate help.



- 4 If you feel the odour of gas, breathe through a damp cloth.

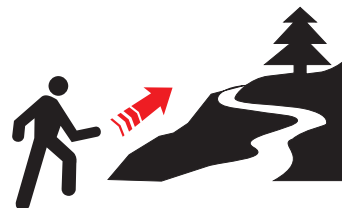


- 5 Try to get to the upper floors of the building if possible.

IF YOU ARE OUTDOORS



- 1 Go indoors and follow the adjacent instructions. If you cannot get indoors, check the direction of the wind and try to avoid the gas by moving to the direction of the sidewind.



- 2 Try to get to a higher ground. It is safer higher up.



- 3 If you get into gaseous air, remain calm. Protect yourself by breathing through a damp cloth.

Do not leave the area without the permission of the authorities. Follow the instructions and wait until the danger is over.

EMERGENCY
NUMBER

112

Further information is also available on the website of the Finnish Radiation and Nuclear Safety Authority at www.stuk.fi and on the website of the rescue services at www.pelastustoimi.fi

The safety bulletin is published every five years. This bulletin is also available at

www.kympe.fi