



Port Site Ammonia Leak-Explosion Procedure

OBJECTIVE:

This procedure is to determine the work steps to be carried out at the port facilities in case of emergency in case of leaks and explosions ammonia which comes to Bandırma Gübre Fabrikaları A.Ş. under the specific circumstances of explosive ammonia originating from ships liquefied by ships during the transport of ammonia by pipelines in the port area

SCOPE:

The entire port area is responsible and includes employees and ship personnel loading and unloading at the port, and other sub-employers working on the port side.

RESPONSIBLE:

Electric department manager:

In any emergency situation, cut off energy of the whole plant or a part which is dangerous.

Maintenance Manager: Provide necessary control of equipment in emergency situation on the port site and ensure that equipment is deactivated after giving necessary approvals.

Employer representative :

To inform the port authority in case of any explosion in the port area.

Ship Master:

To comply with all instructions regarding safety by the port authority or the coastal facility to which it is docked, to take the necessary precautions in the framework of its own emergency plan.

Emergency Coordinator:

Inform the employer in the event of an explosion or fire and coordinates the work of emergency teams.

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Emergency Team:

It provides the evacuation of the people in the buildings in fire, earthquake and similar disasters, makes the first intervention, participates in the search and rescue and extinguishing works and applies first aid when necessary.

Ammonia:

It is corrosive and has an adverse effect on all living creatures in the environment. These effects are burning, suffocating and explosive. In the dense environment, it causes destruction on respiratory system in people. Water, water, CO2 dry chemical powder should be used for fire fighting. The mixture of air with 0/0 15.5 - 0/0 27 causes explosion.



- Flammable gas.
- contains pressurized gas; may explode when heated.
- Toxic by inhalation.
- Causes severe skin burns and eye damage.
- Long lasting, toxic effect in aqueous media.
- Causes erosion in the respiratory tract.
- Keep away from heat / sparks / flames / hot surfaces. - No smoking.
- Do not breathe the gas.
- Avoid giving away.
- Use protective gloves / protective clothing / eye protection / face shield.
- Fire due to gas leak: Do not turn off the leak until it is stopped safely

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IF CONTACT WITH SKIN (or hair): Remove all contaminated clothing immediately. Rinse your skin with water / shower.

IF INHALED: Remove the victim to fresh air and keep it in a comfortable position for easy breathing.

IF IN THE EYES: Rinse cautiously with water for several minutes. Remove the contact lenses if easy to make. Keep rinsing.

GAS RESPONSE FIRE:

- Do not extinguish the leak until it is safely stopped
- We store a well-ventilated area.
- Keep container tightly closed.
- Protect from sunlight.
- Store in a well-ventilated area.

WHAT TO DO IN LEAK- EXPLOSION - FIRE OF AMMONIA

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- The person who is aware of the fire and explosion first makes a warning by pressing the emergency button.
- During the explosion fire, all personnel and subcontractors outside the emergency crews should be urgently directed to the emergency assembly area outside the hazardous area.
- Emergency signs and warning must be observed.
- In this case, all fire systems and teams are intervened with fire water ingenuity.
- Do not try to extinguish with chemical extinguisher, foam, sand, steam
- Avoid toxic gas from the solarium, stand in the opposite direction to the wind.
- eye protection should be used
- All energy from the electricity department will be cut off.
- Risky areas will be determined and all employees will be allowed to go out of dangerous area.
- Vessels loading and unloading in the port shall be informed to the port authority and be removed from the coastal area.
- All crew members perform necessary interventions using non-combustible clothing, breathing equipment.
- After the fire has been disposed of, dangerous gas measurements in the environment and entrance to the corridor without any maintenance are not allowed.
- In the case of poisoning and injuries, first aid teams are commissioned and after the necessary controller is made, referrals are made to the nearest hospital with ambulances if necessary.

FIRST AID MEASURES

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Consult a doctor. Please present this safety data sheet to your doctor.

Contact with Eye

Wash eyes with plenty of water for at least 15 minutes with eyelids open. Remove the contact lens. Do not rub the eye. If irritation occurs in eyes, consult a doctor.

Contact with Skin

Remove dirty clothes and shoes immediately and wash with plenty of water for at least 15 minutes with soapy water. If irritation occurs, consult a physician. Wash dirty clothes and shoes with plenty of water and soap before using.

Respiratory

If the victim is breathing, take it to fresh air and bring it to rest position. If the victim is not breathing, have artificial respiration if you have trained. If unconscious, place in side position and move to side position if necessary. Get immediate medical attention. Call the poison center.

Swallowing

Do not induce vomiting. If swallowed, rinse mouth with plenty of water and seek medical advice immediately.

Acute and Later Observed Significant Signs and Impacts

Asthma complaints, cyanosis (red blood circulation), heart rhythm disturbance, cough, headache, spasm, eye disorders.

First Signs for Medical Intervention and Special Treatment Needs

We receive medical treatment immediately. Treat according to symptoms.

EXPOSURE CONTROLS AND PERSONAL PROTECTION

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Exposure Controls

Ammonia; TWA: 20 ppm / 14 mg / m³ & STEL: 50 ppm / 36 mg / m³

General Protection and Hygiene Measures

Avoid contact with eyes and skin. Breathe your gas. We will wash your hands at the end of the work and at work. Do not eat or drink any food when using this product. Remove your dirty, contaminated clothes immediately.



Respiratory Precautions

Do not breathe gas. Install a full face mask with a filter cartridge (ABEK) suitable for ammonia in the EN 143 standard.

Eye Protection

In areas where there is a high risk of splashing, use safety glasses in accordance with EN 166 with side shields that fit perfectly into the visor and the eyes.

Protection of hands

If necessary, use a chemically resistant disposable, neoprene, PVA, butyl or nitrile rubber glove conforming to EN 374. Check before using gloves.

Preservation of the body

Use full body and water / chemical impermeable work clothes in accordance with EN 465 or EN 467 standards and rubber or plastic work shoes of EN 347 standards. Do not reuse contaminated clothing before washing it.

Environmental Exposure Controls

The provisions of existing legislation for the protection of the environment must be fully implemented. Do not allow it to interfere with water, soil and sewage. Inform the authorities in case of contamination of waterways or sewers.

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