



THE SAFETY REQUIREMENTS TO BE FOLLOWED FOR TRANSPORT OF AMMONIA BY ROAD.

All possible safety precautions are to be taken during the transport of ammonia by roads. The capacity of ammonia tankers is in the range of 12- 17MTs and the tare weight of a 15 MT capacity truck tanker will be 20MT (Apx) The tanks of the truck tankers shall be designed for a pressure of 22 kg/cm² and the temperature range of -34⁰C to 55⁰C and tested at a pressure of 30kg/cm². The maximum pressure normally attained inside the tanker while transporting ammonia is about 7kg/cm².

1. All the truck tankers should hold a valid license to transport ammonia issued by the Chief controller of explosives under static and mobile pressure vessels (Unfired) Rule 1981. All conditions laid in the central Motor Vehicle Rules 1989 are to be strictly complied with.
2. The drivers of the truck tankers shall possess a valid driving license issued by a competent authority and specially trained for safe driving.
3. The driver shall possess valid certificate from a recognised institute approved by DGFASLI for transportation of dangerous goods in accordance with Rule 9 of Central Motor Vehicle Rules -1989, Amendment 1993.
4. For each truck the truck driver shall be assisted by a helper.
5. The tanker should have Goods carrying Permit No and validity.
6. Form No.38, Fitness Certificate of the vehicle and Insurance certificate are to be maintained in the Truck.
7. The truck tankers are equipped with the following safety appliances for emergency and rescue purposes.
 - a) Full Face Gas Masks fitted with Ammonia Canister and a spare.
 - b) Protective gloves, PVC Suits, Goggles, Gum Boots, Containers filled with 25 L water etc
 - c) Gaskets, Spark proof tools etc.
 - d) Fire Extinguisher
 - e) First Aid Box
 - f) Emergency Torch
 - g) Emergency Information panel containing Special label / notices /on Pkgs/ Pictorial Emblem representing particular danger/ UN No / Technical name / Hazchem code are to be displayed on the Tanker.

All the Safety Appliances kept in the road tankers are checked periodically and their inspection reports are documented.

8. The Transport Emergency Card (TREM CARD) of Ammonia (In Hindi, English and Malayalam) as detailed below should be available in the driver's cabin with Telephone Nos for contact during emergency.

9. For easy and safe operation it is advised to fit male 2" QRC to truck inlet isolation valve flange.

TRANSPORT EMERGENCY CARD (ROAD)

CARGO : **LIQUID AMMONIA**
Colourless Liquid with pungent odour

NATURE OF HAZARD:

- Inhalation causes sore throat, coughing, shortness of breath & laboured breathing.
- Causes blurred vision & skin burns
- Irritating gas
- Causes lung oedema
- Ingestion may cause headache, dizziness, nausea and vomiting
- Reacts with moisture(water) with generation of heat
- Long exposure may result in destruction of tissues.

PROTECTIVE DEVICE:

- Suitable respiratory protective equipments
- Plastic/rubber gloves, suits, boots, hood, etc.
- Goggles giving complete protection of eyes

EMERGENCY ACTION:

INFORM POLICE AND FIRE BRIGADE IMMEDIATELY
INFORM FACT AUTHORITIES

Meanwhile,

- If possible, park the vehicles in an isolated area
- Mark roads and warn road users
- Keep/ stay perpendicular to wind direction
- Put on protective clothing.

SPILLAGE:

- Contain leaking liquid with sand or earth, consult an expert.
- Dilute vapours with plenty of water

FIRE:

- Keep containers cool by spraying with water if exposed to fire
- Stop flow of gas, if possible
- Use water spray / fog

FIRST AID:

- Inhalation: Remove the victim to fresh air area, provide artificial respiration or oxygen, if needed. Skin: Remove the contaminated clothes and wash the affected area with plenty of water and soap. Flush with plenty of water for 15 mins. Seek Medical Aid.

EMERGENCY TELEPHONE NUMBERS

Designation	Telephone No
Fire Station	0484-2568333
Udyogamandal Complex	0484-2567333 0484-2545109
Manager, Shift Production, Udyogamandal Complex	9446381118 0484-2545858 0484-2567666
Senior Manager (P)PC-Petro Udyogamandal Complex	0484-2568301 9495105559
Ammonia Handling Petrochemical Plants	0484-2568344 0484-2568308
Safety Office, Udyogamandal Complex	0484-2567213 0484-2567555 0484-2545109

Senior Manager (Safety) Udyogamandal Complex	0484-2567776 9446333370
AM(Fire Services) Udyogamandal Complex	0484-2568666 7012861062
DGM(Prod) Petro-UC Udyogamandal Complex	0484-2568200 0484-2546259
General Manager (Operations) Udyogamandal Complex	0484-2567737 9995491732
Dy General Manager (Materials)	0484 2546567