

Hydrogen, refrigerated liquid

UN No.	1966
CLS	2.1
Trans Cat	2
EAC	2WE
HIN	223

Product

- Colourless, odourless, deeply refrigerated liquefied gas

Nature of hazard

- Highly flammable, may form explosive mixture with air
- Burns with almost invisible flame
- Spilled liquid evaporates quickly, the gas is very cold and produces mist, restricting visibility
- Liquid contact with skin results in cold burns (Injuries may be permanent)
- Liquid contact with eyes results in severe injury (Injuries may be permanent)
- Heating will cause pressure rise, severe risk of bursting and subsequent explosion
- Spilled liquid has very low temperature, can cause material embrittlement
- The gas is suffocating without warning

PPE for vehicle crew

- Suitable eye protection
- Suitable gloves providing thermal insulation
- Anti-static protective boots

Emergency Actions by driver

Notify Police and Fire Brigade *immediately* then:

- Do**
- Move vehicle to open ground, where practical
 - Stop engine, isolate electrics
 - Keep public away from danger
 - Keep upwind
 - Avoid contact with liquid
 - Advise and assist Emergency Services

- Do not**
- Allow naked lights
 - Smoke
 - Enter dense vapour clouds
 - Touch liquid or bare pipes without suitable protection
 - Attempt to deal with any fire involving the load, but minor vehicle fires should be tackled with the vehicle fire extinguishers, if safe to do so
 - Allow water to be sprayed onto relief valves

Emergency Information (Driver and Emergency Services)

First Aid

- In case of contact with liquid, slowly thaw frosted parts with cold water, then remove clothing carefully
- Seek medical treatment when anyone has symptoms apparently due to inhalation, burns or contact with skin or eyes

Emergency Services Information

PPE

- Emergency Services as per vehicle crew. Emergency Action Code requires full protection

Fire

- Keep load cool by spraying with water - significant risk of catastrophic failure due to increasing pressure when exposed to fire
- Do not extinguish a leaking gas flame unless absolutely necessary. Consult an expert. Extinguish any other secondary fires
- The substance is easily ignited and may burn with an almost invisible flame
- Keep personnel away and upwind

Spillage

- Shut off leaks, if safe to do so
- Remove, or make safe, all sources of ignition
- Keep personnel away and upwind
- Safety devices may operate unexpectedly when heat applied or insulating jacket damaged, causing danger from cryogenic liquid spraying onto personnel
- Use low sparking hand tools and explosion-proof electrical equipment
- Consider evacuation

Emergency telephone number

UK: 0500 020202

Republic of Ireland: 01 4566526

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