



NITROUS OXIDE

UN 1070 (Compressed gas)

UN 2201 (Refrigerated liquid)

Shipping Name: Nitrous oxide, compressed
Nitrous oxide, refrigerated liquid

Other Names: Dinitrogen monoxide Nitrogen oxide
Laughing gas



Hazards:

- Container may explode or BLEVE when exposed to fire
- Vapors are heavier than air and will collect and stay in low areas
- Contact with liquid may cause frostbite
- May form explosive mixtures with air at elevated temperatures
- Decomposition products upon heating include toxic nitrogen oxides

Description:

- Colorless gas
- Shipped and stored as a cryogenic liquid
- Slightly sweet odor
- Soluble in water
- Nonflammable but will support combustion
- Vapors are heavier than air and will collect and stay in low areas

Awareness and Operational Level Training

Response:

- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Remove all ignition sources
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE or explosion
- Evacuate or shelter in place the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies

Operational Level Training Response:

RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Ventilate confined area if it can be done without placing personnel at risk

FIRE:

- Material does not burn; fight surrounding fire with an agent appropriate for the burning material
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of expanding), withdraw immediately to a secure location

First Aid:

- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
 - ◆ Inhalation - remove the victim to fresh air and give oxygen if available
 - ◆ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
 - ◆ Eye - rinse eyes with large volumes of water or saline for 15 minutes
- Seek medical attention
- Frostbite - warm injured area in very warm water

CAS: 10024-97-2