



NICKEL CARBONYL

UN 1259

Shipping Name: Nickel carbonyl
Other Names: Nickel tetracarbonyl
Tetracarbonyl nickel



- WARNING!** • **POISON! BREATHING THE VAPOR OR SWALLOWING THE MATERIAL CAN KILL YOU! RELEASES CARBON MONOXIDE IN THE BODY!**
- Fire fighting gear (including SCBA) provides NO protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
 - **EXPLOSIVE! MATERIAL MAY EXPLODE WHEN MIXED WITH AIR AT TEMPERATURES AS LOW AS 68°F EVEN WITHOUT AN IGNITION SOURCE!**

Hazards:

- Highly flammable
- Vapors are heavier than air and will collect and stay in low areas
- Container may BLEVE when exposed to fire
- Vapors may travel long distances to ignition sources and flashback
- Vapors in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Irritating to skin, eyes, nose and lungs

Awareness and Operational Level Training Response:

- **DO NOT ATTEMPT RESCUE!**
- 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
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

Description:

- Colorless to yellow liquid
- Musty or sooty odor
- Sinks in water and is slightly soluble in water
- Highly flammable
- Vapors are heavier than air and will collect and stay in low areas
- Freezes at -2° F and boils at 109° F
- Produces large amounts of vapor

Operational Level Training Response:

RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water to disperse vapors - contain runoff
- Consider the application of foam to spilled liquid to control vapors
- Ventilate confined area if it can be done without placing personnel at risk

FIRE:

- Approach fire with extreme caution; consider letting burn
- Specially trained personnel operating from a safe distance can fight fires using foam or dry chemical if available in sufficient amounts. Under favorable conditions, experienced crews can use coordinated fog streams to sweep the flames off the surface of the burning liquid. Keep exposures cool to protect against re-ignition. Do not direct straight streams into the liquid.
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cylinders are exposed to excessive heat from fire or flame contact, withdraw immediately to a secure location

First Aid:

- **DO NOT ATTEMPT RESCUE!**
- 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
 - ◆ Swallowed - do not make the victim vomit
- Victims should be examined by a physician as soon as possible
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing
- Note to physician: converted to carbon monoxide in the body; if symptoms indicate, initial treatment includes 100% oxygen