

## Storage and Transportation of Dry Ice

Special care should be taken when storing and transporting dry ice. By following these NIGP safety guidelines will be ensured.

### Containers

Specially designed containers are required for dry ice storage and transport. Containers and their corresponding transport pallet are available for purchase from NIGP.



### Storage

Several factors can affect the rate at which dry ice sublimates from solid state into gaseous carbon dioxide.

These include:

- The ambient temperature and humidity
- The quality of the storage container
- The number of times the container is opened and closed

The better the insulation, the slower the sublimation rate, the longer the quality of the product will be maintained.

The below list offers suggestions for the proper storage of dry ice:

- Always store dry ice in a properly designed container
- Keep the container lid closed when not in use
- Always secure the container lid open before reaching in to unload the product
- Avoid leaning into the container for longer than necessary

- Do not store dry ice in any gas-tight container as within large containers, gas atmospheres will build up
- Do not expose dry ice to high ambient temperatures unnecessarily as this increases the sublimation rate and thereby the risk of a carbon dioxide-rich atmosphere
- Do not store dry ice in cellars or unventilated rooms
- Ensure adequate low-level ventilation wherever dry ice is stored

## Transport

The below list offers suggestions for the safe transportation of dry ice:

- Avoid transporting dry ice in the cabin of a truck or the passenger compartment of a car. If this is unavoidable the load should be well insulated and adequate ventilation must be maintained
- It is preferable to transport dry ice in vehicles where the driver's cabin is isolated from the load compartment
- Always secure the load compartment doors in the open position before entering. For large 'walk-in' load compartments, the doors should be capable of being opened from the inside
- Always ensure that there is adequate ventilation during transportation and before entering the load compartment to unload the product
- Always carry a 'Carbon Dioxide (solid) Safety Data Sheet' in the cabin or driver's compartment of any vehicle carrying dry ice
- Always unload the product as soon as possible at the end of the journey and move it to a suitable storage location

