

What are the hazards and how might they harm?



Severe frostbite from skin contact with dry ice (temperature -78°C)



Impact injuries where CO₂ build-up results in uncontrolled movement of containers







Explosion

What PPE should the individual wear?





What other precautions should be taken?



Keep areas where dry ice is handled and stored well ventilated

Dry ice

Safety Task Card

Unit Managers – use page overleaf to list any hazards and control measures specific to your site which are not listed below

Safe System of Work

- 1. Only handle dry ice if you have been trained to do so.
- 2. Use a trolley when transporting dry ice.
- 3. Dry ice must be stored, handled and used in well-ventilated areas.
- 4. Do not store dry ice in a cold-room, a walk-in fridge or freezer, or any other confined space.
- 5. Storage containers must be well ventilated and not sealed; they must allow the release of CO₂ gas. Thermal containers work best and can be provided by the supplier; never store dry ice in glass.
- 6. Wear loose fitting cryogenic gloves to EN511, ensure your arms and legs are fully covered and that you are wearing shoes that fully enclose feet, and use eye protection, when handling dry ice.
- 7. Use suitable equipment such as a scoop or tongs, and never handle dry ice with bare hands.
- 8. Do not touch items that have been in contact with dry ice.
- 9. If dry ice is being used for display purposes, ensure the ice is not accessible to the guests, unauthorised staff or members of the general public.
- 10. Dry ice must never be served directly in food or drink products.
- 11. Avoid lone working in internal storage areas.
- 12. To dispose of dry ice, place it in a well-ventilated area at room temperature, where it will sublime (change from solid to gas) and dissipate. Do not pour water onto dry ice and never dispose of it down a sink or by placing in a waste bin.

Continued on reverse

If you have any concerns, stop and speak with your line manager before proceeding.



List any additional hazards or risks you have identified, and control measures required to manage these.

Dry ice continued

Safety Task Card STCCS 66

Safe System of Work

Transportation

Dry ice should only be transported in a vehicle if the drivers cab is separate from the storage area, and the dry ice must in a loose-fitting lidded container that is properly secured. When opening the storage area after transport, allow some time for ventilation, so any CO₂ can dissipate in the air, before you enter the storage area.

First Aid

Inhalation — Remove individual to well-ventilated area and keep them warm and rested. Call a doctor. Perform cardiopulmonary resuscitation (CPR) if breathing stopped.

Skin contact – In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance

Eye contact – Immediately flush eyes thoroughly with plenty of water for at least 15 minutes

Ingestion – Get immediate medical attention.

High concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.

Low concentrations case increased respiration and headache.

Major spillage

Ventilate and evacuate area, restrict access and allow CO₂ to disperse into the atmosphere.

If you have any concerns, stop and speak with your line manager before proceeding.