



DRY ICE SAFE HANDLING PROCEDURE

AGSB-DI-P01-00
Date: 14/10/2019
Page 1 of 3
Owner: Operation Department

Revision	Effective Date	Prepared by	Approved by	Remarks
0	15-10-2019	<hr/> Queenie Khor Project Engineer	<hr/> Alan Lim Operation Manager	- New issuance



DRY ICE SAFE HANDLING PROCEDURE

AGSB-DI-P01-00
Date: 14/10/2019
Page 2 of 3
Owner: Operation Department

1) Purpose

To provide safety information and guidance in relation to the safe use, handling and storage of dry ice.

2) Hazard Description

- 2.1 Dry ice is the solid form of carbon dioxide (CO₂). Dry ice is available for use in the form of pellets or blocks and may be supplied loose or in insulated containers.
- 2.2 Dry ice is very cold (-78 °C). It sublimates (turns directly from a solid to a gas without passing through the liquid phase) to an asphyxiant gas (CO₂) that is heavier than air. It is important to note that a little bit of dry ice will sublime to a large volume of gas and it should therefore be used only in well ventilated areas.
- 2.3 Dry ice must be handled using appropriately insulated gloves. Contact with bare skin can result in severe cold burns or frostbite within a short period of time.
- 2.4 Use of dry ice in poorly ventilated areas can result in the depletion of the oxygen level resulting in asphyxiation. Symptoms may include increased respiration, headaches, nausea, vomiting, loss of mobility, loss of consciousness.
- 2.5 Placing dry ice into a tightly sealed container can produce sufficient gas build up to cause an explosion. This must be avoided.

3) Handling, Storage & Transport Dry Ice

- 3.1 Do not handle dry ice with bare hand. Always wear gloves when handling dry ice.
- 3.2 Do not transport dry ice in bad ventilated truck. Be sure to frequently circulate the air while transporting dry ice to maintain a safe breathing environment.
- 3.3 Storage of dry ice in well-insulated container (eg: Styrofoam cooler) to keep the bags of dry ice from evaporate too much. This will also prevent from handling the dry ice directly.
- 3.4 Never store dry ice in a tightly sealed container, such as plastic or glass bottle or any container with screw-top lid that will not vent.
- 3.5 Do not leave dry ice unattended around children or open area.



DRY ICE SAFE HANDLING PROCEDURE

AGSB-DI-P01-00
Date: 14/10/2019
Page 3 of 3
Owner: Operation Department

4) Disposal of Dry Ice

- 4.1 To dispose of dry ice, place it in a well-ventilated area at room temperature; the remainder of the ice will sublimate away.
- 4.2 Never dispose of dry ice in a trash can, chemical waste container or other garbage/waste can.
- 4.3 Never dispose of dry ice in a sink, toilet or other fixture; the temperature difference can destroy the plumbing.