



Product Name: Dry Ice

MSDS No.: MSDS007

Date: 14 June 2018

My Gas Material Safety Data Sheet

1. Chemical Product and Company Identification

Product Name: Carbon Dioxide, Solid or Dry Ice	Other means of identification: Dry ice (nuggets, pellets or blocks) carbonice, carbonic anhydride
Product Use: Many	UN Number: 1845
Chemical Formula: Carbon Dioxide	Chemical Family: CO ₂
Telephone:	Supplier /Manufacture: My Gas Phone: 010 072 0995

**Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your My Gas sales representative.*

2. Hazards Identification

MAIN HAZARDS: Refrigerated solidified gas. Contact with product may cause cold burns or frostbite. Dry ice sublimates to carbon dioxide vapor at - 109°F (-78°C). Vapor may displace oxygen and cause rapid suffocation.

3. Composition and Information on Ingredients

Name: Carbon Dioxide, Solid or Dry ice
Product Identifier: CAS No 124-38-9 - 100%

UN NUMBER: 1845

4. First Aid Measures

FIRST AID MEASURE AFTER INHALATION: Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.



Product Name: Dry Ice

MSDS No.: MSDS007

Date: 14 June 2018

FIRST AID MEASURES AFTER SKIN CONTACT: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

FIRST AID MEASURES AFTER INGESTION: Ingestion is not considered a potential route of exposure.

5. Fire Fighting Measures

FLAMMABLE: No. **IF YES, UNDER WHAT CONDITIONS?** Not applicable.

Evacuate all personnel from danger area. Do not discharge sprays onto solid carbon dioxide. Solid carbon dioxide will freeze water rapidly. Never handle solid carbon dioxide with your bare hands. Use gloves or dry ice tongs or a dry shovel or scoop. Move packages away from fire area if safe to do so. Self-contained breathing apparatus may be required by rescue workers. On site fire brigades must comply with OSHA 29 CFR 1910 Subpart L-fire Protection.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

PERSONAL PRECAUTIONS: Use protective clothing. Wear cold-insulating gloves/face shield/eye protection. Chemical asphyxiant. Exposure to low concentrations for extended periods may result in dizziness or unconsciousness, and may lead to death. Wear self-contained breathing apparatus when entering area unless atmosphere is proven to be safe. Never handle solid carbon dioxide with your bare hands. Use gloves or dry ice tongs or dry shovel or scoop.

ENVIRONMENTAL PRECAUTIONS: Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations.

7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING: Avoid materials incompatible with cryogenic use; some metals such as carbon steel may fracture easily at low temperatures. Vapor can cause rapid suffocation due to oxygen deficiency. Never allow any unprotected part of your body to touch solid carbon dioxide or to touch uninsulated pipes or vessels containing solid or liquid carbon dioxide or cold carbon dioxide gas. Not only can you suffer frostbite your skin may stick fast to the cold surfaces. Use tongs or insulated gloves when handling solid carbon dioxide or objects in contact cold carbon dioxide in any form. Wear protective clothing and equipment as prescribed.



Product Name: Dry Ice

MSDS No.: MSDS007

Date: 14 June 2018

8. Exposure Controls/Personal Protection

APPROPRIATE ENGINEERING CONTROLS: Oxygen detectors should be used when asphyxiating gases may be released. Ensure exposure is below occupational exposure limits (where available). Systems under pressure should be regularly checked for leakages. Provide adequate general and local exhaust ventilation. Consider work permit system.

HAND PROTECTION: Cold insulating gloves.

RESPIRATORY PROTECTION: When work place conditions warrant respirator use, follow a respiratory protection program that meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use and air supplied or air purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used the cartridge must be appropriate for the chemical exposure. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus.

THERMAL HAZARD PROTECTION: Wear cold insulating gloves.

OTHER INFORMATION: Wear safety shoes while handling containers.

9. Physical and Chemical Properties

PHYSICAL STATE: Solid	APPEARANCE: Opaque, White crystalline solid	
MOLECULAR MASS: 44g/mol	COLOR: White	ODOR: No odor warning properties
VAPOUR DENSITY: 5730 kPa	SOLUBILITY IN WATER (mg/l): Water 2000 mg/l completely soluble.	
FLAMMABILITY RANGE VOL% IN AIR: Non flammable	BOILING POINT: -78.4°C	MELTING POINT: -78.5°C

10. Stability and Reactivity

CONDITIONS TO AVOID: Electrical discharge and high temperatures decompose carbon dioxide into carbon monoxide and oxygen.



Product Name: Dry Ice

MSDS No.: MSDS007

Date: 14 June 2018

11. Toxicological Information

TOXICITY INFORMATION: Skin corrosion/irritation not classified ph.: 3.7 (carbonic acid). Serious eye damage/irritation not classified ph.: 3.7 (carbonic acid).

12. Ecological Information

No ecological damage caused by this product.

13. Disposal Considerations

WASTE DISPOSAL METHOD: Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

14. Transport Information

TDG/IMO SHIPPING NAME: Carbon Dioxide

HAZARD CLASS: Class 9 49 CFR
173.140

IDENTIFICATION #: UN1845

SHIPPING LABEL(s): Carbon Dioxide, Solid

PLACARD (When Required): Non-flammable, non-poisonous gas

SPECIAL SHIPPING INFORMATION:

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure there is adequate ventilation. Ensure that containers are firmly secured.

15. Regulatory Information

Ensure all national/local regulations are observed.
(124-38-9)



Product Name: Dry Ice

MSDS No.: MSDS007

Date: 14 June 2018

16. Other Information

NFPA health hazard: 3-short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard: 0-Materials that will not burn.

NFPA reactivity: 0-Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA specific hazard: SA-This denotes gases which are simple asphyxiants.