

# Compressed Gas Association Safety Bulletin

**SB-18—1992**

## **USE OF REFRIGERANT (HALOGENATED HYDROCARBONS) RECOVERY CYLINDERS**

### **SCOPE:**

This document is intended as a recommended guide of good practice to be used on a voluntary basis by all who supply, use, store or transport refrigerant recovery cylinders. Serious personal injury and property damage can result from improperly filled cylinders.

The following precautions are recommended for the safe handling of used refrigerant:

1. Use personal protective equipment, such as side shield glasses, gloves, safety shoes and hard hat, when filling and handling cylinders.
2. Avoid skin contact with liquid refrigerant since it may cause frostbite.
3. Be aware that inhalation of high concentrations of refrigerant vapor is harmful and may cause heart irregularities, unconsciousness or death. Since vapor is heavier than air, avoid low areas without suitable ventilation.
4. Do not apply open flame or heat cylinder above 125° F (52° C).
5. Do not artificially cool cylinder.

Use only cylinders designed and marked for refrigerant recovery service. **DO NOT REUSE** cylinders intended for virgin refrigerant service. Make certain the cylinder is charged only with the refrigerant for which it is designated and labeled. **DO NOT** mix different refrigerants in the same cylinder.

### **PRE-FILL PROCEDURES**

- ☰ Prior to filling a recovery cylinder, identify the refrigerant to be recovered and **make certain the cylinder is marked and labeled for that refrigerant. Read all labels.**
- ☰ Make certain the cylinder retest date has not expired. **Do not fill** if the present date is more than 5 years past the most recent marked test date.
- ☰ Inspect cylinder for signs of damage, such as dents, gouges, corrosion. **Do not fill** damaged cylinders.
- ☰ Inspect valve for damage and ease of operation.
- ☰ Determine maximum allowable gross (filled) weight—this should be prominently marked on the side of the cylinder.

### **FILLING PROCEDURE**

- ☰ Be sure you have an accurate scale suitable for weighing the cylinder and contents, a proper gauge set manifold and proper hoses and connectors.
- ☰ Be sure cylinder is free standing on the scale with no restriction of free movement caused by hoses, connections, etc.
- ☰ Monitor pressure during filling carefully. **DO NOT** exceed maximum service pressure which is stamped on shoulder or collar of the cylinder.

- ≡ Monitor gross weight during filling to assure that overfilling does not occur.
- ≡ Shut off valve if maximum gross weight or service pressure is reached. **DO NOT OVERFILL.**
- ≡ After recovery, close cylinder valve securely.
- ≡ Check weigh cylinder.

## PRE-SHIPMENT PROCEDURES

- ≡ Leak check. **DO NOT** ship a leaking cylinder.
- ≡ Apply outlet cap.
- ≡ Apply steel valve protector cover.
- ≡ Make certain cylinder bears appropriate DOT (TC) label and refrigerant identification/ precautionary labels and markings.
- ≡ Inspect valve for damage and ease of operation.
- ≡ Determine maximum allowable gross ( filled) weight—this should be prominently marked on the side of the cylinder.

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1725 JEFFERSON DAVIS HIGHWAY ARLINGTON VA 22202

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Compressed Gas Association  
1725 Jefferson Davis Highway  
Suite 1004  
Arlington, Virginia 22202-4102  
Phone: (703) 412-0900  
Fax: (703) 412-0128

CGA Canada Office  
57 Tradewind Drive  
Oakville, ON L6L 6K8  
Canada  
Phone: (905) 465-2043  
Fax: (905) 465-2044

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