



COMPRESSED GAS ASSOCIATION, INC.

SAFETY BULLETIN

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USE OF REFRIGERANT (HALOGENATED HYDROCARBONS) RECOVERY CYLINDERS

Scope

This document is 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:

- Use personal protective equipment such as side shield glasses, gloves, safety shoes, and hard hat when filling and handling cylinders;
- Avoid skin contact with liquid refrigerant since it may cause frostbite;
- 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;
- Do not apply open flame or heat cylinder above 125 °F (52 °C); and
- 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. DO NOT mix different refrigerants in the same cylinder.

Prefill procedure

- a) 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;
- b) 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;
- c) Inspect cylinder for signs of damage, such as dents, gouges, and corrosion. Do not fill damaged cylinders;
- d) Inspect valve for damage and ease of operation; and
- e) Determine maximum allowable gross (filled) weight. This should be prominently marked on the collar of the cylinder.

Filling procedure

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

- d) Monitor gross weight during filling to assure that overfilling does not occur;
- e) Shut off valve if maximum gross weight or service pressure is reached. DO NOT OVERFILL;
- f) After recovery, close cylinder valve securely; and
- g) Check weigh cylinder.

Preshipment procedure

- a) Leak check. DO NOT ship a leaking cylinder;
- b) Inspect valve for damage;
- c) Apply outlet cap;
- d) Apply steel valve protective cover (when applicable);
- e) Make certain cylinder bears appropriate Department of Transportation (DOT) and/or Transport Canada (TC) label and refrigerant identification/precautionary labels and markings; and
- f) Determine maximum allowable gross (filled) weight. This should be prominently marked on the collar of the cylinder.

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Work Item 05-05
Cylinder Specifications Committee

NOTE—This reaffirmed edition may include minor editorial changes; however, all technical information is the same as the second edition.

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