



Technical Data

Materials Compatibility

Gas Compatibility

The compatibility data shown on pages 2 and 3 of this section have been compiled to assist in evaluating appropriate materials for use in handling various gases. It is extremely important that all gas control equipment be compatible with the gas being used. The use of a device that is not compatible may damage the unit and cause a leak that could result in property damage or personal injury. To reduce potentially dangerous situations, always check for the compatibility of materials before using any gases in your gas control equipment.

Since combinations of gases are virtually unlimited, mixtures (except for Oxyfume® and Medifume™ sterilizing gas mixtures) are not listed in the Compatibility Chart. Before using a gas mixture or any gas not listed in the chart, we strongly urge you to contact Praxair for information.

Directions

To use the compatibility chart on the following pages, proceed as follows:

- 1** Locate the gas you are using in the first column of the chart.
- 2** Check the materials of construction you intend to use. Materials of Construction have been grouped by metals, plastics and elastomers.
- 3** Refer to the applicable "Key to Materials Compatibility Symbol".
- 4** Verify that the "Key to Materials Compatibility Symbol" allows this combination and that the application is satisfactory.

Key to Materials Compatibility

- S** – Satisfactory for use with the intended gas.
- C** – Conditional. May be incompatible under some circumstances or conditions. Contact your Praxair representative for additional information.
- U** – Unsatisfactory for use with the intended gas.
- I** – Insufficient data available to determine compatibility with the intended gas.
- O** – All nonmetallic, even those considered compatible, may be ignitable in oxygen enriched environments or in other oxidizing gases. Successful use depends upon oxygen purity, pressure, temperature, cleanliness and elimination of ignition mechanisms. Please contact your Praxair Representative for additional information.

Important

This information is for experienced operators who know the general principles and the safety precautions to be observed in handling specialty gases and associated equipment. If you are not certain you fully understand these safety precautions, we urge you to obtain and read the applicable Material Safety Data Sheet (MSDS) and Equipment Instruction Booklet.

The information contained in the Compatibility Chart has been compiled by Praxair from what it believes are authoritative sources and it is offered solely as a convenience to customers. While Praxair believes that this information is accurate and factual as of the date of this publication, this information is intended to be used only as a guide in providing general information with respect to the products mentioned; and, therefore, it is not to be taken as a warranty or representation for which Praxair assumes legal responsibility.

Since the user's product formulation, specific use application, and conditions of use are all outside Praxair's control, Praxair makes no warranty or representation regarding the result which may be obtained by the user. It shall be the responsibility of the user to determine the suitability of the user's gas control.