



Propane

Propane (C_3H_8) applications will typically be classified under the application guidelines for [High gas molecular weight](#), [low suction temperature applications](#) or [low gas suction pressure](#) (The most stringent of these criteria shall apply).

There are several special application considerations for propane service. The minimum suction temperature for gray and ductile iron is $-40^{\circ}F$ ($-40^{\circ}C$). Ariel Application Engineering should review all applications with suction temperatures below 0 degrees F (-18 degrees C).

Some applications utilize propane in a closed loop refrigeration service. These applications must be reviewed to insure that the settle out pressure of the system is less than the [MAWP](#) of the system or that adequate controls and protection are provided to protect the compressor cylinders. In closed loop refrigeration service, cylinder lube rates should be monitored and may require adjustment.

High [Pseudo-q values](#) are common in Propane applications. Valve selection is critical in these applications, therefore a valid gas analysis is required.

Gases with high propane content tend to dilute standard compressor cylinder lube oils, thereby reducing the gas/oil mixture viscosity. Propane is oil soluble and tends to wash the lubrication film away.

Refer to the [Propane Gas Properties](#) for information on propane gas.

See Cylinder and Packing Lubrication Requirements--6 in the Ariel [Packager Standards](#) for guidelines regarding cylinder and packing lubrication for Propane service.