

Safety

General: Safety in the application and use of industrial hose is a major concern because of the many potentially dangerous products conveyed, and because so many people are involved. Handling these products can be accomplished safely if a few simple precautions are strictly observed. Some of the most important of these are:

- All operators must be thoroughly trained.
- The correct hose must be selected to handle the application.
- The couplings must be correct for the application and also must be securely attached.
- Both hose and couplings should be well maintained and inspected regularly (pages 188 through 192).

Critical Items: While many industrial hose applications are potentially dangerous, a few are of particular concern because their danger is not always so obvious or generally understood. This is particularly true for non-industrial applications where there is greater potential for operation by untrained personnel. A discussion of some of the more common of these follows. (ordering information for RMA publications is on page 223).

Gasoline Pump Hose: The proliferation of self-service gasoline stations has created a situation where millions of consumers are daily operators of gasoline pumps. This has greatly increased the concern of station operators and suppliers for equipment safety. Gasoline pump hoses in particular are subject to frequent abuse by daily wear and accidents. Hose selection must include consideration of the amount of use and abuse it must withstand during its service life. Only the highest quality, thoroughly tested, UL listed hose must be selected for that service. The proper hose plus constant inspection is the best protection against user accidents. DO NOT USE GASOLINE PUMP HOSE FOR FUELING OF AIRCRAFT.

LP Gas Hose: This discussion again emphasizes the importance of hose selection. LP Gas has volatile characteristics that require special hose construction. The rubber compounds must be designed to handle LP Gas, and the cover must be perforated to prevent gas build-up among the various layers of the hose. Use of the wrong hose may lead to early and sudden failure. In particular, anhydrous ammonia hose is not recommended for LP Gas service. This is important to emphasize because both types of hose are often used in the same area and care must be taken they do not become accidentally switched. DO NOT USE LP GAS HOSE FOR ANHYDROUS AMMONIA. Couplings are also a concern in this service; permanent crimp steel couplings are recommended, as well as high pressure steel inserts attached with interlocking, bolt-on clamps. Couplings with

male swivel end styles are not recommended. DO NOT USE WITH SCREW-TOGETHER REATTACHABLE COUPLINGS. Parker LP Gas Hose is listed in the LP Gas section of this catalog. (Refer to RMA Publication IP-10 "Liquid Petroleum Gas, Specifications for").

WARNING ⚠ For LP Gas use ONLY. Do not use for anhydrous ammonia. Do not use with male swivel couplings. Do not use with screw-together reattachable couplings.

Anhydrous Ammonia (NH₃) Hose: Contact with Anhydrous Ammonia will burn skin, and is especially damaging to the eyes and lungs. This is true for its liquid and gaseous (vapor) state. Many accidents involving NH₃ have occurred by using the wrong hose. NH₃ hose must be specially compounded and constructed to handle the material, and other hoses may fail very quickly and suddenly. It is, therefore, especially important to make sure that only Anhydrous Ammonia hose is recommended and used for this service. In particular, LP Gas hose is not recommended for anhydrous ammonia ⚠ service. This is important to emphasize because both types of hose are often used in the same area and care must be taken they do not become accidentally switched. DO NOT USE ANHYDROUS AMMONIA HOSE FOR LP GAS OR REFRIGERATION SERVICE. Couplings are also a concern in this application; permanent steel crimp couplings are recommended. Couplings with male swivel end styles are not recommended. Parker Anhydrous Ammonia hose is listed in the Acid & Chemical section of this catalog. (Refer to RMA Publications IP-14 "Anhydrous Ammonia Hose, specifications for" and IP-11-2 "Anhydrous Ammonia Hose, Manual for Maintenance, Testing and Inspection").

WARNING ⚠ For anhydrous ammonia use ONLY. Do not use in LPG or refrigeration applications. Do not use with male swivel couplings. Do not use with screw-together reattachable couplings.

Natural Gas: The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases, and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7132/7232 L.P. Gas Hose can be used for natural gas service, but only under the following conditions:

- Maximum working pressure of the application not to exceed 50 PSI.
- The application must be in an outside or open environment.
- Applications that are in an enclosed environment or greater than 50 PSI working pressure are not

