

**ATL**  
**PRODUCT SAFETY BULLETIN**  
IMPORTANT PRECAUTIONS IN USING ATL FLEXIBLE TANKS,  
BLADDERS, DRUMS, PLUGS, VALVES, LINERS AND AIR CELLS

1.) **Compatibility:** Be certain your ATL product is designed to handle the temperature and fluid in question. When in doubt, contact ATL to discuss specific model numbers and material types. **Never** subject any item to Ketones, Chlorinated Solvents, Concentrated Acids, Alkalies, Pure Aromatics or temperatures over 140°F unless specifically designed for that service and approved by ATL.

2.) **Personnel Protection:** Be prepared for the unexpected. All personnel handling fuels and hazardous chemicals must wear **full protective clothing** and equipment of an impervious, non-static and flame-resistant type. Specific information should be sought from your fuel/chemical vendors, industry associations and producers of personnel protection systems.

3.) **Multiple Uses:** Some ATL tanks can be sufficiently cleaned to store or transport several different, but similar, liquids without contamination. However, **never** take this factor for granted. Field and laboratory testing are **always** required before suitability can be assured. ATL can frequently provide material samples and scale models to assist in your analysis. **Never** switch a fuel or chemical container to a comestibles use.

4.) **Pressure:** Most ATL products are designed for use at ambient pressure. Unless specifically designated, **Do Not** subject any container, valve or connection to pressure differential. **Do Not** restrict venting; **Do Not** overfill or exceed maximum height; **Do Not** exceed normal flow rates during filling or discharging; and **Do Not** pressurize any inflatable unless **fully** restrained and enclosed. Always allow a 10% volume factor (ullage) to compensate for vapor expansion, thermal expansion and overfill. Those products designed for pressurization should be fully contained or restrained in a rigid structure before filling.

5.) **Fire & Explosion:** **Always** exercise the utmost care in containing, transferring, venting or processing flammable and combustible materials. Keep away from fire, flame, heat, spark, static charge, oxygen, lightning, focusing lenses, friction, turbulence or any combustible materials that could spontaneously ignite. Refer to your industry specialists and publications such as The National Fire Prevention Association Code for proper avoidance of fire and explosion hazards.

6.) **Accessories:** Fittings, flanges, piping, hoses, valves, vents, meters, pumps etc. used in **conjunction** with ATL products must be designed, selected and maintained for leak-tightness, galvanic compatibility, chemical compatibility, thread and seal compatibility, as well as appropriate grounding, electrical bonding, vibration tolerance, tamper-resistance, flexibility, flow capacity and mounting methods. Get professional assistance to assure **total** system functionality and safety.

7.) **Personnel Training:** ATL products are of a technical nature and are frequently used in conjunction with hazardous materials. All operating and support personnel must be **trained** in the user's specific application of these ATL items. A full familiarity with the important **safety** precautions and procedures is essential before any such devices are placed in service. Each user must establish his own **training program** geared to his particular industry and specific application.

8.) **Environmental Considerations:** ATL products are engineered so as not to endanger the water, air and land environments. Many ATL devices are, in fact, employed specifically for pollution abatement purposes. Nevertheless, wherever fuels and potentially hazardous substances are stored, ATL recommends the simultaneous use of its **secondary containment** products such as:

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|---------------------------------------|----------------------|
| 1.) Permanent Berm Liners             | 4.) Tank "Envelopes" |
| 2.) Inflatable Berm and Liner Systems | 5.) Portable Dikes   |
| 3.) Pit and Pond Liners               | 6.) 2-ply Flex Tanks |

**9.) Weathering:** Undue exposure to the natural elements may adversely affect ATL products. **Minimize** exposure to sunlight (ultraviolet), ozone, severe hail, ice loading, freeze-thaw cycling, water immersion and extremes of temperature. ATL offers these protective accessories to help guard against adverse weathering effects:

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|---------------------------------|------------------------|
| 1.) Sun-Shield Covers           | 3.) Metal Containers   |
| 2.) Ground Cloths & Geotextiles | 4.) Fire-Shield Covers |

This equipment, in conjunction with reasonable care and maintenance, will significantly improve the retention of physical properties and hence product longevity.

**10.) Flex Fatigue:** Like most materials, the polymers, laminates and flexible composites used in most ATL products can **weaken** from severe pinching, creasing, folding, and flex-cycling. Normal collapsing and extending produce no ill effects, but compaction, inversion and crushing will decrease physical properties. Some materials comprised of high performance filaments are especially susceptible to flex-fatigue and require diligent care to avoid abuse during packing, operating, storing and unfolding.

**11.) Set Up and Installation:** ATL provides **User Manuals** and/or installation instructions for most standard products. However, specialty items and custom made products require the user to formulate his own procedures or draw on established standards such as ASTM, ASME, SAE, ISO etc.

**12.) Cleaning and Storing:** All products should be periodically **cleaned**, especially if they are to be stored for extended periods. Follow the User Manual procedures or contact ATL for assistance.

**13.) Leak Testing:** Prior to use, all tank and container type products should be leak tested. This procedure can **generally** be done with 1/8 psi air pressure and a standard bubble-type leak detector solution. Follow the **User Manual** procedure or **contact ATL** for help. Always rinse and dry the surface after testing.

**14.) Intended Purpose:** Never use an ATL product for an application other than that intended unless specifically authorized. For example, don't use a static storage tank for dynamic operations, don't use an air inflatable to contain nitric acid or a berm liner as a field cover. Be methodical; order precisely what you need, and avoid "adaptations".

**15.) Abrasion:** Plastics, rubber and fabrics can **deteriorate** from excessive abrasion or chafing. ATL's compounds minimize this wearing effect, but all efforts should be made to **avoid** dragging, rubbing, cutting and scuffing of flexible materials. Poly slip-sheets, talc, light oil and "doubler" patches frequently help ward off abrasion, but the best protection is reasonable care in handling and use.

**16.) Repairs:** All repairs to ATL products should be performed at the **factory**. When this is not practicable, and where field repairs are authorized, a reasonably skilled technician can patch and seal most ATL flexible containers. Be certain to use only the appropriate ATL repair kit, and perform the repair in a clean, well-equipped facility, following the repair instructions precisely. Remember, not all damage is repairable. **Do Not** attempt to repair a tank, drum, air cell etc. that has been broadly weakened by chemical attack, ozone effect, UV exposure etc.

**17.) When in Doubt:** Do Not take chances. **Please** contact ATL for assistance. We can help either directly or by referral to a source of safety information for your particular problem. Here are 6 ways to reach ATL for technical help:

ATL Main Phones	201-825-1400
ATL Toll Free	800-526-5330
ATL Fax	201-825-1962
ATL Mail	Aero Tec Laboratories Inc., 45 Spear Road, Ramsey, N.J. 07446-1251 USA
e-Mail	<a href="mailto:atl@atline.com">atl@atline.com</a>
Web	<a href="http://www.atline.com">www.atline.com</a>

ATL-UK Phones	44 - (0) - 1908-351700
ATL-UK Fax	44 - (0) - 1908-351750
Web	<a href="http://www.atlltd.com">www.atlltd.com</a>