



Plei-Tech[®] Descriptions

As a Custom-Molder of precision cast polyurethane parts, **Pleiger Plastics Company** offers many polyurethane systems that are tailored for specific applications:

- Abrasion Resistance
- High Temperature
- Low Coefficient of Friction
- High Shock Absorbing Properties
- Tear and Tensile Propagation
- Flexlife and Fatigue Performance
- FDA Dry or Wet Food Grade
- MSHA Approvable
- Chemical Resistance

Listed below are just a few of **Pleiger's** standard polyurethane compounds. We are not limited in providing just standard material but we tailor for the very special needs of those requirements set forth by the application and the demanding market trends.

- Plei-Tech 00** - Plei-Tech 00 is a polyester based compound developed in conjunction with Plei-Tech 22 to offer alternatives to Plei-Tech 15. Plei-Tech 00 offers outstanding tear strength, good abrasion resistance, excellent resistance to petroleum-based chemicals, and is suited for moderate dynamic loading. Plei-Tech 00 is available in 70° A to 95° A. Maximum service temperature is 200° F. Standard Color is red, however this product is not color stable.
- Plei-Tech 10** - Plei-Tech 10 is a polyester, polyether, or polycaprolactone based polyurethane. Plei-Tech 10 is a very high performance polyurethane, which is best suited for the most demanding applications. Plei-Tech 10 offers outstanding cut, abrasion, and solvent resistance. In addition to exceptional physical properties Plei-Tech 10 also offers excellent dynamic properties. Plei-Tech 10 is available in 80°A, 90°A, 93°A, and 97°A hardnesses. Maximum service temperature is 230° F (intermittent to 275° F). Only available in natural color.
- Plei-Tech 12** - Plei-Tech 12 is a polyether based polyurethane that utilizes NDI as a hard segment. Plei-Tech 12 offers excellent abrasion and cut resistance, and is well suited for high dynamic loading. Plei-Tech 12 was specifically designed to give the advantages of Plei-Tech 15 in wet and high humidity environments, and is available in hardness from 60° A to 60° D. This compound generally meets MSHA approval. Maximum service temperature is 200° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 13** - Plei-Tech 13 is a polycaprolactone based polyurethane that utilizes NDI as a hard segment. Plei-Tech 13 offers excellent abrasion and cut resistance, and is well suited for high dynamic loading. Plei-Tech 13 was specifically designed to give superior dynamic and high humidity performance to that of Plei-Tech 15, and superior dynamic performance and chemical resistance compared to Plei-Tech 12. It is available in hardness from 60° A to 95°A. This compound generally meets MSHA approval. Maximum service temperature is 210° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 15** - Plei-Tech 15 is a polyester based polyurethane that utilizes NDI as a hard segment. Plei-Tech 15 offers excellent abrasion and cut resistance, and is well suited for high dynamic loading. Plei-Tech 15 performs well in solvent and oil environments, and is available in hardness from 60°A to 60° D. This compound generally meets MSHA approval. Maximum service temperature is 200° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).



- Plei-Tech 22** - Plei-Tech 22 is a polyester based polyurethane. Plei-Tech 22 is a compound developed by Pleiger Plastics Company as an alternative to Plei-Tech 15. Plei-Tech 22 offers excellent abrasion resistance, solvent resistance, and resistance to petroleum based chemicals. Plei-Tech 22 is available in hardnesses from 40° A to 52° D. This compound generally meets MSHA approval. Maximum service temperature 190° F. Color coding is available.
- Plei-Tech 23** - Plei-Tech 23 is a polyester based polyurethane that is available in durometers from 60°A to 95°A. This material has higher tensile strength, tear strength, and flexlife than standard PT-22 in the same durometer ranges, however it falls short of PT-22 in dynamics and solvent applications. PT-23 can be color coded. Maximum service temperature is 190° F.
- Plei-Tech 24** - Plei-Tech 24 is an FDA wet and dry food approved urethane system. This material has high tensile strength, tear strength, and flex properties, which approach that of Plei-Tech 10 and Plei-Tech 15. Plei-Tech 24 is available in hardnesses from 60°A to 95°A. Maximum service temperature is 190° F. Natural Color only.
- Plei-Tech 25** - Plei-Tech 25 is a polyester based polyurethane that is available in durometers from 60°A to 85°A. This material has higher tensile strength, tear strength, elongation, and in some cases superior solvent resistance to PT-22 in the same durometer ranges. This compound has inferior abrasion and dynamic properties compared to PT-22. Maximum service temperature is 190° F. This material can be color coded.
- Plei-Tech 26** - Plei-Tech 26 is a polyester based compound developed in conjunction with Plei-Tech 22 and Plei-Tech 00. Plei-Tech 26 offers outstanding tear strength, comparable to Plei-Tech 00, and excellent abrasion resistance, comparable to Plei-Tech 22, excellent resistance to petroleum-based chemicals, and is suited for moderate dynamic loading. Plei-Tech 26 is available in 70° A to 85° A. Maximum service temperature is 190° F. This material can be color coded.
- Plei-Tech 31** - Plei-Tech 31 is a polyester based polyurethane that is available in 60°A and 70°A durometer. This material is specifically designed where low resiliency damping is desirable. This compound is not suited for high dynamic loading. However, it can be color coded, and has a maximum service temperature of 180° F.
- Plei-Tech 66** - Plei-Tech 66 is a polycarbonate based polyurethane that utilizes NDI as a hard segment. Plei-Tech 66 offers excellent abrasion and cut resistance, and is well suited for high dynamic loading. Plei-Tech 66 performs equal to Plei-Tech 12 and better than Plei-Tech 15 in wet environments and is equal to Plei-Tech 15 in solvent and oil environments. Plei-Tech 66 is available in hardness from 60° A to 50° D. This compound generally meets MSHA approval. Maximum service temperature is 280° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 92** - Plei-Tech 92 is a polyether system characterized by having a very high resiliency. This compound has the best long-term water stability of all the Plei-Tech compounds. Plei-Tech 92 is available in hardnesses from 5°A to 90°A. Maximum service temperature is 190° F. This compound generally meets MSHA approval and can be color coded.
- Plei-Tech 93** - Plei-Tech 93 is a polycaprilactone polyurethane system. This compound is a compromise between polyether systems and polyester systems. This compound typically falls in between ester and ether systems in physical properties and environmental stability. Plei-Tech 93 is available in durometers from 60°A to 80°A. Maximum service temperature is 200° F. Color coding is available.



- Plei-Tech 95** - Plei-Tech 95 is a polyether based polyurethane. Plei-Tech 95 offers excellent performance in dynamic loading and shock absorption. Plei-Tech 95 is available in hardnesses from 80° A to 75° D. Plei-Tech 95 is suited for applications involving hydrolysis, mild acids, and gasoline. This product generally meets MSHA approval. Maximum service temperature is 200° F. Standard color is black, however this material is not color stable.
- Lubrithane** - Lubrithane is a polyester based polyurethane with special additives to provide a reduced coefficient of friction. Lubrithane is ideal for belt scraping applications because of good abrasion resistance and a low coefficient of friction. Lubrithane is available in hardnesses from 60° A to 50° D. Maximum service temperature is 190° F. Color is Grey / Black.
- Plei-Tech 12 Foam** - Plei-Tech 12 Foam is an open / closed cell polyurethane foam based upon Vulkollan (Plei-Tech 15) chemistry. This product has tremendous dynamic performance and abrasion resistance and is used where high frequency low loads are present. Plei-Tech 12 foam performs better than Plei-Tech 15 foam in wet environments. Density ranges are from .30 g/cc to .60 g/cc. This material is ideal for bumpers and cushions that require high displacements (up to 70%). Maximum service temperature is 200° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 13 Foam** - Plei-Tech 13 Foam is an open / closed cell polyurethane foam based upon Vulkollan (Plei-Tech 15) chemistry. This product has tremendous dynamic performance and abrasion resistance and is used where high frequency low loads are present. Plei-Tech 13 foam performs better than Plei-Tech 15 foam in wet environments. Density ranges are from .30 g/cc to .60 g/cc. This material is ideal for bumpers and cushions that require high displacements (up to 70%). Maximum service temperature is 210° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 15 Foam** - Plei-Tech 15 Foam is an open / closed cell polyurethane foam based upon Vulkollan (Plei-Tech 15) chemistry. This product has tremendous dynamic performance and abrasion resistance and is used where high frequency low loads are present. Density ranges are from .30 g/cc to .60 g/cc. This material is ideal for bumpers and cushions that require high displacements. Maximum service temperature is 200° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 22 Foam** - Plei-Tech 22 Foam is an open / closed cell polyurethane foam based upon Plei-Tech 22 chemistry. This product has good dynamic performance and abrasion resistance, and is used in place of Plei-Tech 15 when performance requirements are not as demanding. Density ranges are from .30 g/cc to .60 g/cc. This material is ideal for bumpers and cushions that require high displacements (up to 70%). Maximum service temperature is 190° F. Color is natural, which is a cream color that will discolor when exposed to UV light. (No properties are lost in this color transformation).
- Plei-Tech 66 Foam** - Plei-Tech 66 Foam is an open / closed cell polyurethane foam based upon Vulkollan (Plei-Tech 15) chemistry. This product has tremendous dynamic performance and abrasion resistance and is used where high frequency low loads are present. Plei-Tech 66 foam performs better than Plei-Tech 15 and Plei-Tech 13 in wet environments. Density ranges are from .30 g/cc to .60 g/cc. This material is ideal for bumpers and cushions that require high displacements (up to 70%). Maximum service temperature is 280° F. Color is natural, which is a light brown that turns to dark brown when exposed to UV light. (No properties are lost in this color transformation).

Plei-Tech is a registered tradename of Pleiger Plastics Company
Lubrithane is a registered tradename of Pleiger Plastics Company
Vulkollan is a registered tradename of Bayer AG

This flier is produced as a summary of polyurethanes offered by Pleiger Plastics; it is not intended as specifications. For specific applications requirements contact Pleiger Plastics Company.