THE FACTS:
DIFFERENCES BETWEEN PEX A, B AND C

In today’s market, there are many misconceptions about the PEX type differences and quality. All manufacturers will attempt to convince you that their type is the best. But what are the facts?

At GTGlobe Industries, we are bringing you only the facts and we are providing you with information from trusted, independent sources and authorities. All information can be verified and validated as our goal is to help you make a clear decision.

GTGlobe Industries is producing PEXa, PEXb and PEXc; however, GTGlobe Industries favor PEXb as it presents the best cost efficient solution while not reducing quality.

Please refer to the attached matrix and the footnoted sources of information.
<table>
<thead>
<tr>
<th>PEX type</th>
<th>Production method</th>
<th>Approved by</th>
<th>Min bending radius(^3)</th>
<th>Min recommended bending radius(^2)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEX A</td>
<td>Peroxide process also known as &quot;Engel PEX&quot;, due to the name of the inventor of PEX. This is a two stage hot cross-linking process occurring while the material is in its anamorphic or &quot;hot&quot; state. Peroxides are normally incorporated during the extrusion process and cross-linking is achieved by heating the High Density Polyethylene (HDPE) above the decomposition temperature of the peroxides to create the &quot;free radicals&quot; which initiate the cross-linking.</td>
<td>&quot;All three processes produce tubing that exceed the minimum requirements of ASTM F876 and are acceptable for potable water distribution applications. All PEX that has been tested and certified for potable applications carries the mark(s) of nationally recognized third-party certification agencies such as NSF, IAPMO, […]&quot;(^1)</td>
<td>½&quot; diameter pipe = 3¾&quot; radius</td>
<td>½&quot; diameter pipe = 5&quot; radius</td>
<td>Most expensive, generally between 40% to 200% more than PEXb</td>
</tr>
<tr>
<td>PEX B</td>
<td>Silane process is often referred to as &quot;moisture cure&quot; method because the materials cross-link or cure on exposure of the pipe to water. This process uses HDPE resin with additives that react when the pipe is exposed to heat and moisture after extrusion.</td>
<td></td>
<td></td>
<td></td>
<td>Less expensive due to production methodology cost efficiency</td>
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<tr>
<td>PEX C</td>
<td>Radiation process is produced in a two stage process using gamma/beta energy. First High Density Polyethylene (HDPE) is extruded into pipe. After the extrusion process, cross-linking of the HDPE is achieved by bombarding the pipe with electromagnetic radiation (gamma) or high energy electrons (beta). These processes referred to as nuclear and electron beams respectively, occur from the outside in.</td>
<td></td>
<td></td>
<td></td>
<td>More expensive than PEXb, generally by about 30% to 60%</td>
</tr>
</tbody>
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\(^1\) As per Plastic Pipe and Fittings Association USA [http://www.ppfahome.org/plex/faqpex.html]

\(^2\) Canadian Standards Association [www.csa.org]

\(^3\) As per different manufacturers using and installation guides which can be easily found on the internet and doing a search on “radius”.

In conclusion, the only difference between PEX A, B and C is:

1- **Production method**: there is actually no plumbing application requiring a specific production method.
2- **Flexibility**: yes, PEX A is slightly more flexible, but **EVEN IF** PEX A is more flexible than PEX B and PEX C, there are **NO** manufacturers that recommends to bend it more than 6 times its outside diameter (½” SDR9 pipe outside diameter = 5/8”, which means a maximum bending radius of 3¾”), **WHETHER IT IS PEX A, B OR C**.
3- **Cost**: ask yourself: do you need to pay more for properties that are useless as the recommendations do not require these properties anyway? PEX B is the most cost efficient type on the market, period. Do you want to throw your money out the window or you are looking for profitability and certified products?

Whether the major manufacturers produce PEX A, PEX B, or PEX C, they all have the same certifications. All PEX cannot exceed 200°F constant temperature at 80psi. If all PEX manufactures have the same certifications, then why would you pay twice or more for a little more flexibility when **YOU DON'T NEED THAT FLEXIBILITY ANYWAY? ALL PEX WILL MEET YOUR INSTALLATION REQUIREMENTS.**

**Quick reminders**

Whenever you are buying a plumbing product, always make sure of these points:

- **Certifications**: to be used with potable water, PEX pipes need to be certified NSF in USA and CSA in Canada. To comply with the minimum quality requirements, they all need to be produced under ASTM standards.
- **Warranty**: make sure the manufacturer is offering a warranty. You don’t want to get any problems in case the product has defects.

If you have any question, feel free to contact us and we'll assist you in your decisions. Our only goal is that you make the best decision that suits Your needs.