

UHMW Polyethylene (UPC-16 HT)

UPC-16 HT is an ultra-high molecular weight (UHMW) polyethylene-based material that is manufactured in a cleanroom environment for purity.

UPC-16 HT has excellent wear resistance in water and other aqueous solutions and is suitable for low-speed, low-pressure service. It is recommended for food contact applications at temperatures from -450°F to $+180^{\circ}\text{F}$ (-268°C to $+82^{\circ}\text{C}$).

Chemical Compatibility

UPC-16 HT performs well in water and other aqueous solutions. It is highly suitable for use in contact with ketones, alcohols, amines and esters and has limited applications in contact with oxidizing acids and chlorinated solvents. It is suitable for sterilization using gamma radiation.

(For more compatibility information, request report TR-60A, or go to www.balseal.com/technical-library. Select Technical Reports, then select TR-60A Chemical Compatibility Guide.

FDA and USP Compliant

UPC-16 HT is an "FDA compliant" resin for use in food contact. It meets FDA Regulation 21 CFR 177.1520, USDA and USP XXIII, Class VI requirements.

Bal Seal defines "FDA compliant" as materials that have been found by the FDA to be "safe for use in food contact" or "acceptable for use in food contact. (Report 50-640).

Mechanical Properties

Tensile strength, Min	ASTM D638	5,000 psi (352 kg/cm ²)
Elongation, Min	ASTM D638	300%

Color

White, translucent

Cost:

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Typical Applications

- Pharmaceutical dispensing and packaging equipment
- Food mixers and blenders
- Food processing equipment handling powders and slurries
- Surgical instruments
- Recirculating laboratory pumps

Other Information

For additional information, please contact a Technical Sales Representative at (949) 460-2100. Bal Seal maintains a vast library of material references and test information.

It is essential that the customer run evaluation testing under actual service conditions with a sufficient safety factor to determine if the proposed, supplied or purchased Bal Seal Engineering products are suitable for the intended purpose and to confirm expected results. Bal Seal Engineering makes no warranty, express or implied, regarding Bal Seal Engineering products or of the information contained herein, including but not limited to, warranties of merchantability, performance, and fitness for a particular use or purpose. Bal Seal Engineering shall not be liable for any loss or damage of any kind or nature that may result from the use of, reference to, or reliance on, the information contained herein, including, but not limited to, consequential, special (including loss of profits) direct, indirect, incidental, or similar damages, even if Bal Seal Engineering has been advised of the possibility of such damages. © 2014 Bal Seal Engineering, Inc. All rights reserved. RT-66 (50-699) and M 37 Rev. A (623-35, 623-64) 1-21-14

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