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## Bulk Density & Particle size

Bulk density is the exact volume of space the gelatin takes up! Bulk density is determined by pouring the gelatin into a graduated cylinder. Once filled and leveled with a spatula the loose density calculation is recorded, then the cylinder is tapped 15 times on the bench top and the packed density is recorded. The test is repeated three times and the average value is extracted. Our test results are expressed in grams per Cubic Centimeter (g/cc). You may convert our expression to any unit of measurement that fits your need.

Gelatin's Bulk density changes the most when it's blended with other particle sizes. Gelatin is generally categorized into mesh sizes 5 to 100 mesh which translates to a [U.S. STD SIEVE](#) size. Gelatin that is 5 mesh would look like a piece of rice where 100 mesh would look like baking flour a fine white powder. Gelatin is always sold in a range particular care should be exercised in dissolving gelatin. It is important that the gelatin be completely dissolved so as to get the maximum benefit. Gelatin, being hygroscopic, absorbs water readily. The finer the gelatin is ground, the faster it absorbs water. It is therefore important to choose the right grind of gelatin to suit the method of dissolving. In principle, there are three different groupings of product form.

- Coarse ground gelatin (5 -20 mesh) is used when air should not be incorporated into the solution. The gelatin is mixed gently into cold water in a jacketed kettle, and then allowed to hydrate for at least one hour. Next, the gelatin is melted and dissolved by the application of moderate heat. Coarser mesh gelatins are recommended when the concentrations of gelatin is over 10% by weight in your finished product.
- Medium ground gelatin (30-40 mesh) can be dissolved the same way coarse gelatin is. Medium ground gelatin can also be dissolved instantly by adding it directly to warm water above 140° F. The gelatin must be added at a slow enough rate with vigorous stirring, so that each particle is moistened throughout and the formation of lumps is avoided.
- Finely ground gelatin is dissolved with warm water (130° -160° F) using vigorous stirring and well – adjusted dosage to avoid lumps. It may be desirable to dry blend the gelatin with other powders such as sugar or dextrose to help disperse the gelatin more completely in the water. This is absolutely necessary when extremely fine mesh (80-100 mesh) is to be dissolved.

Just remember the mesh or particle size does not affect the properties of the gelatin once it is dissolved. Particle size mainly comes into play when determining processing procedures. The method you choose to use in dissolving or mixing the gelatin. If you are creating dry blends remember that particle size uniformity, will help with even blending and product separation during settling.

Our standard offering for Beef and Pork gelatin is a 40 mesh blend. That is 99.9 % of the gelatin will go through a 40 [U.S. STD SIEVE](#). It contains particles that just barely fit through the 40 mesh screen to the finely ground 100 mesh particle sizes. No two blends or lots will ever be the same, some may have a larger amount of larger particles others may have a larger amount of smaller particles. This is why the bulk density will change slightly from blend to blend.

<b>What We Stock</b>		
<b>Products</b>	<b>Mesh</b>	<b>Bulk Density</b>
<b>All Beef &amp; Pork Gelatin</b>	<b>40 Mesh</b>	<b>0.61 ± 0.06 g/cc</b>
<b>250 Bloom Pork Gelatin</b>	<b>8 Mesh</b>	
<b>225 &amp; 250 Bloom Beef Gelatin</b>	<b>30 over 40 mesh</b>	
<b>200 Bloom Fish Gelatin</b>	<b>8 mesh</b>	
<b>Beef Hide Hydro</b>	<b>30 mesh</b>	<b>0.4 ± 0.1 g/cc</b>
<b>Beef Bone Hydro</b>	<b>30 mesh</b>	<b>0.4 ± 0.1 g/cc</b>
<b>Beef Bone I.D. Hydro</b>	<b>30 mesh</b>	<b>0.15 ± 0.05 g/cc</b>
<b>Beef Hide I.D. Hydro</b>	<b>30 mesh</b>	<b>0.15 ± 0.05 g/cc</b>
<b>Fish Hydro</b>	<b>30 mesh</b>	<b>0.375 ± 0.125 g/cc</b>
<b>Pork Hydro</b>	<b>30 mesh</b>	<b>0.350 ± 0.150 g/cc</b>
<b>SuperWhip Gelatin</b>	<b>40 Mesh</b>	<b>0.61 ± 0.06 g/cc</b>
<b>Gelatin Dessert</b>	<b>30 mesh</b>	