

Dry curing:

1 teaspoon of Cure #1 and 1/3 cup of salt per 5lbs of meat. Rub and knead the mix into the meat extremely well, paying close attention to bone structures.

Wet cure brine:

1 gallon of water

1 heaping tablespoon Cure #1

1/3 -1 Cup of Kosher or Sea salt

1 Cup of sugar, honey, agave, stevia, or splenda

1 Cup of light brown, or dark brown sugar, or splenda brown sugar.

**Amount of salt and sugar used can be altered based on dietary needs or personal taste. A minimum of 1/3 cup of salt is required. Sugar should only be used at refrigerator temperatures.

** Wet brine is not per weight of the meat like dry curing.

**If meat is over two inches in thickness and or has bone structures, use a meat injector to inject the brine solution into the meat.

Cure #1 works best between 36-40F and the curing process will stop completely at 28F.

Maximum concentration safely allowed by the USDA is 3.84oz of cure #1 per gallon of brine. 1 heaping tablespoon is approximately 1oz.

Cure #1 is the safest cure to use because it requires the use of a refrigerator. If you wish to dry cure without a refrigerator please do adequate research to ensure you are using the appropriate amount of and applying at the required intervals of cure #2.

Main brands of Cure #1:

Some Other Names:

Pink Salt;

Tinted Cure Mix (TCM);

Tinted Curing Powder (TCP);

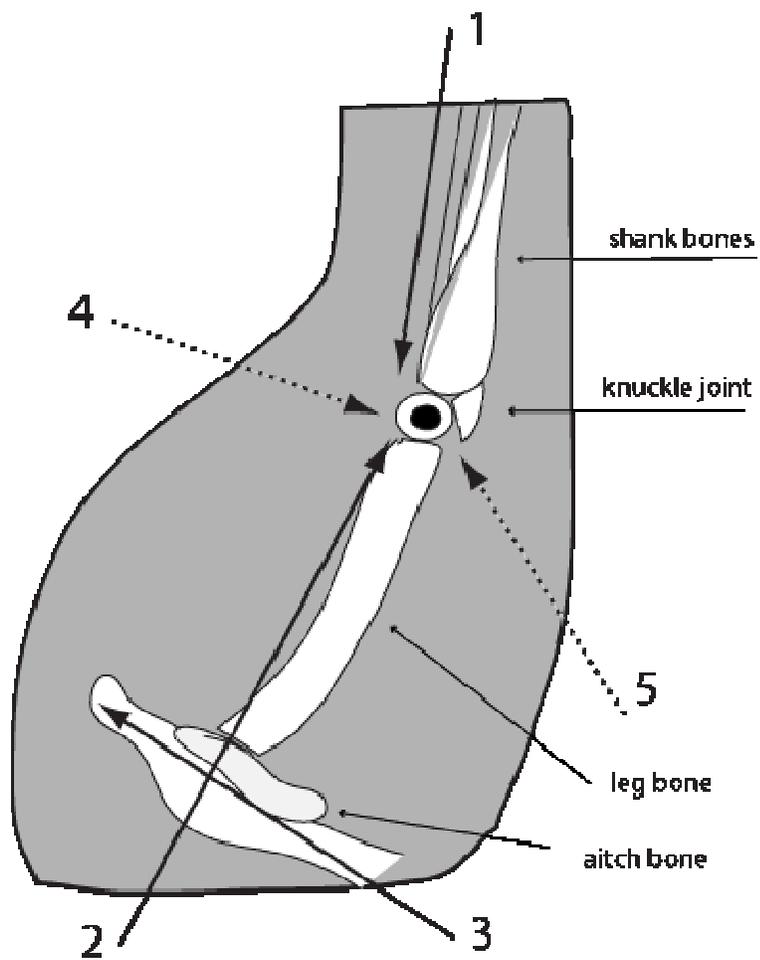
Prague powder #1;

InstaCure #1;
Modern cure;
D.Q. powder;
FLP;
L.E.M. cure;

Sure cure;

Fast Cure

Here is a picture of where to inject a Fresh Ham/ Hog leg:



The following information describes all curing salts including other names they are commonly known as. However, all measurements listed in the document pertain to sausage making only and are not to be used for wet curing purposes.

Curing Salts for Sausage Making

The following list contains cures that are commonly used in the United States of America. Instructions for use are given for sausage only.

CURING SALTS

CURING SALTS	DESCRIPTION	HOW TO USE
<p>CURING SALTS In general</p>	<p>Though salt has properties that can cure meat, when one talks about curing salts or cures they are referring to the use of sodium nitrite, potassium nitrite, sodium nitrate or potassium nitrate (saltpeter) which are used in the processing of their meat. The main reasons to use curing salts in smoked sausages are to prevent botulism poisoning, as well as impede the development of many food spoiling bacteria that can thrive in low temperature environment of a smoker. But that is not all that cures do. These curing ingredients also retard rancidity, provide the characteristic flavor, color and extend the self life of the meat.</p> <p>For the purposes of this article, curing salts fall into two main categories; pure and premix. Today in the United States it is extremely rare for the home user to use a pure cure; which would be pure sodium nitrite or pure sodium nitrate or potassium nitrate (saltpeter). These pure cures can still be obtained by the home user, but are used in such small quantities it is nearly impossible for the home user to measure accurately, or to evenly distribute the cure.</p> <p>Fortunately premixes have appeared on the market that can easily be used by the home user. There are many commercial premixes on the market, but the one's this article will concentrate on are Cure #1 or Cure #2, and the Morton premixed cures. These manufacturers have diluted the pure cures with salt to makes it much easier for the home user to measure accurately. Morton also adds sugar to their premixed cures.</p>	<p>Extreme caution must be exercised in using these cures; never use more than called for in the recipe. In general, for all cures and cure mixes, are designed to be used at the rate specified in the formulation or recipe. When used as directed curing salts are safe for home use. (More details on using individual cures are provided for each cure listed).</p> <p>It is important to remember, more is not better and it can be toxic. Using these ingredients in higher levels your curing results will be inconsistent, cured meats may be too salty, the finished products may be unsatisfactory and/or nitrite burn can occur.</p> <p>During the curing stage, always keep meat refrigerated (36° to 40°F). The closer to 40°F, the better; lower temperatures will slow the curing process, and temperature below 28°F will stop the curing.</p> <p>IMPORTANT: All these cures should be stored safely out of</p>

	<p>These premixes reduce the possibility of serious error that could occur if handling pure sodium nitrate or sodium nitrite. In addition, excessive amounts of nitrates or nitrites which are not evenly distributed may cause a green-brownish color of the meat's pigment. This is a form of oxidation that can happen with any cured meat or sausage, but is more likely to happen in an acid environment, such as in fermented sausages. This form of greening of cured meats is referred to as "nitrite burn."</p>	<p>the reach of children. This is particularly true with cure #1 & 2. The pink candy like color is attractive to children. All cures should be kept in their original container, and away from ingredients such as salt and sugar that they could be mistaken for; this is especially so for cures without a dye.</p>
<p>SODIUM NITRATE <i>Some other names:</i> Chile saltpeter, Peru saltpeter, sodium saltpeter, nitric acid sodium salt</p> <p style="text-align: center;">and</p> <p>POTASSIUM NITRATE <i>Some other names:</i> saltpeter, saltpetre, nitrate of potash</p>	<p>Sodium Nitrate and its chemical equivalent potassium nitrate are interchangeable. For the most part potassium nitrate has been replaced with sodium nitrate – which is considered more stable and reliable; both are extremely poisonous. These ingredients are still widely used for home curing outside the United States, but it is recommended that these cures should only be used in its pure form by meat processing plants. In such plants this is done by trained personnel under strict supervision. Therefore it is highly recommended when using nitrates to obtain it in premixed cures that can be safely and accurately measured; such as in cure #2, and the Morton cures which are discussed in more detail latter on.</p> <p>Nitrates are considered a slow cure, and are referred to as a “time release capsule.” It does not cure meat directly and initially not much happens when it is added to meat. With nitrates the curing is dependent on the amount of bacteria present, and the environment (temperature) the bacteria need to grow. For nitrates to work as a cure it requires the presents of certain microorganisms. These microorganisms are present in all meats, and start to react with the nitrates to reduce them to nitrites. It is the nitrites that will start the curing process.</p> <p>This is a slow process that steadily releases nitrites over a long period of time. This makes it well suited for curing products that require long curing times. Dry cure products can take as long as several weeks to several months to fully cure. Nitrates are used for making dry cure sausages; such as pepperoni, hard salami, geonoa salami, dried farmers sausage, capicola, etc, and dry cure meats that are not cooked or need to be cooked.</p>	<p>Pure sodium nitrates or potassium nitrates are still widely used outside of the United States, but they are not recommended for home use in this country. Commercially, the USDA does not allow nitrates to be added to sausage or meat that will be cooked.</p> <p>The United States Federal regulations permit a maximum addition of 2.75 ounces of sodium or potassium nitrate per 100 pounds of ground meat/fat that will be made into dry cured (fermented) sausages. Since smaller quantities will be use for home sausage making, these small quantities would be difficult to weigh out on most available home scales, it is strongly recommended that a commercial premixed cure be used.</p>
SODIUM NITRITE	Sodium nitrite and its chemical equivalent	Pure sodium nitrite or

<p><u>Some other names:</u> Nitrous acid sodium salt, Diazotizing salt, Anti rust</p> <p style="text-align: center;">and</p> <p>POTASSIUM NITRITE</p>	<p>potassium nitrite are interchangeable. Though for the most part potassium nitrite has been replaced by sodium nitrite as the preferred cure. It is considered more stable and reliable. Both are extremely poisonous, and should only be used in it pure form by meat processing plants. In such plants this is done by trained personnel under strict supervision. Pure nitrites are so toxic, it is rare that the home user can obtain them. It is highly recommended if using nitrites to obtain it in premixed cures that can be safely and accurately measured; such as in cure #1, cure #2 and Morton Tender Quick and Sugar Cure (plain); which are discussed in more detail.</p> <p>Nitrites are used for curing meats that will be cooked, and must be used in sausages that are smoked at low temperatures over a long period of time. Nitrites are considered a fast acting cure, because they begins to cure immediately upon contact with the meat. Nitrites possess antimicrobial properties that make them an excellent preservative. They are a very effective agent in protecting foods from most food spoiling bacteria, and most importantly they prevent the growth of clostridium botulinum that causes botulism poisoning.</p> <p>Botulism, though it can grow in improperly low acid canned/vacuumed foods and juices; was once referred to as the 'Sausage Disease' - botulus is Latin for sausage. Sausage at one time was the most common source of botulism poisoning, and is now the second most common source. The primary source is caused by improper home canning. To read more on food borne bacteria click here</p> <p>In addition to its antimicrobial properties, nitrites retards rancidity, provide that characteristic flavor of a cured meat, color (pint to red depending on what type of meat is cured) and extends the self life of meat. Nitrites are used to cure foods that require a short curing time and will be smoked or cooked; such as bacon, smoked sausage, semi-dry sausage, hot dogs, bologna, and other smoked or cured meats, fish, and poultry.</p>	<p>potassium nitrite are not recommended for home use. In the United States Federal regulations permit a maximum addition of 0.25 ounce of sodium or potassium nitrite per 100 pounds of ground meat/fat. Since the small amount of nitrites are difficult to weigh out on most available home scales, it is strongly recommended that a commercial premixed cure be used.</p>
<p>CURE #1 <u>Some Other Names:</u> <i>Pink Salt;</i> <i>Tinted Cure Mix (TCM);</i> <i>Tinted Curing Powder (TCP);</i></p>	<p>This premix is use in meats and sausages that require a short curing time, and will be smoked, cooked or canned. It is a blend of salt and sodium nitrite, and of course it has the curing properties of sodium nitrite. The salt is added as a carrier and to make it easier to measure. In the United States it is dyed pink, so chefs and the</p>	<p>Use as directed, more is not better and it can be toxic. To ensure that the cure is distributed more evenly in your sausage, mix it with the liquid that your recipe calls for, or mix it with the meat</p>

<p><i>Prague powder #1;</i> <i>InstaCure #1;</i> <i>Modern cure;</i> <i>D.Q. powder;</i> <i>FLP;</i> <i>L.E.M. cure;</i> <i>Sure Cure;</i> <i>Fast Cure</i></p>	<p>home user will not mistake it for salt or sugar. Though it goes by several different brand and generic names, they all have the same formula of 93.75% salt, and 6.25% sodium nitrite (1 pound of salt plus 1 ounce of sodium nitrite).</p> <p>Cure #1 can be used as a dry brine (dry cure) or in a wet brine (pickle). It provides the same curing properties of sodium nitrite, and is considered a quick cure, because it starts curing immediately upon contact with the meat. As mentioned earlier, this type of cure is used for curing meats for a short period of time that will be cooked, smoked, or canned. This includes poultry, fish, ham, bacon, luncheon meats, corned beef, pates, sausages and other products too numerous to mention.</p> <p>NOTE: This is not interchangeable with cure #2, or any of the Morton brand name cures. Also do not mistake this for recipes calling for sodium nitrite, which means pure sodium nitrite.</p>	<p>prior to grinding.</p> <p>Use as follows: Cure per pound of ground meat/fat:</p> <table border="1" data-bbox="1073 352 1432 976"> <thead> <tr> <th rowspan="2">Amount of Meat/Fat</th> <th colspan="2">Amount of Cure</th> </tr> <tr> <th>Vol.</th> <th>Wt.</th> </tr> </thead> <tbody> <tr> <td>1 lb.</td> <td>1/4 tsp.</td> <td>.05 oz.</td> </tr> <tr> <td>2 lbs.</td> <td>3/8 tsp.</td> <td>.08 oz.</td> </tr> <tr> <td>3 lbs.</td> <td>1/2 tsp.</td> <td>.10 oz.</td> </tr> <tr> <td>4 lbs.</td> <td>3/4 tsp.</td> <td>.15 oz.</td> </tr> <tr> <td>5 lbs.</td> <td>1 tsp.</td> <td>.20 oz.</td> </tr> <tr> <td>10 lbs.</td> <td>2 tsp.</td> <td>.40 oz.</td> </tr> <tr> <td>15 lbs.</td> <td>1 Tbsp.</td> <td>.60 oz.</td> </tr> <tr> <td>20 lbs.</td> <td>1 Tbsp. + 1 tsp.</td> <td>.80 oz.</td> </tr> <tr> <td>25 lbs.</td> <td>1 Tbsp. + 2 tsp.</td> <td>1.00 oz.</td> </tr> <tr> <td>50 lbs.</td> <td>3 Tbsp. + 1 tsp.</td> <td>2.00 oz.</td> </tr> <tr> <td>100 lbs.</td> <td>6 Tbsp. + 2 tsp.</td> <td>4.00 oz.</td> </tr> </tbody> </table> <p>tsp. = teaspoon; Tbsp.= Tablespoon; oz.= ounce</p> <p>Although cure #1 has salt in the mix, when using it in sausage making additional salt needs to be added.</p>	Amount of Meat/Fat	Amount of Cure		Vol.	Wt.	1 lb.	1/4 tsp.	.05 oz.	2 lbs.	3/8 tsp.	.08 oz.	3 lbs.	1/2 tsp.	.10 oz.	4 lbs.	3/4 tsp.	.15 oz.	5 lbs.	1 tsp.	.20 oz.	10 lbs.	2 tsp.	.40 oz.	15 lbs.	1 Tbsp.	.60 oz.	20 lbs.	1 Tbsp. + 1 tsp.	.80 oz.	25 lbs.	1 Tbsp. + 2 tsp.	1.00 oz.	50 lbs.	3 Tbsp. + 1 tsp.	2.00 oz.	100 lbs.	6 Tbsp. + 2 tsp.	4.00 oz.
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<p>CURE #2 <u>Some Other Names:</u> <i>Prague powder #2;</i> <i>InstaCure #2;</i> <i>Modern cure #2;</i> <i>D.Q. powder #2</i></p>	<p>This cure is a blend of salt and sodium nitrite and sodium nitrate. The salt is added as a carrier and to make it easier to measure. In the United States it is dyed pink, so chefs and the home user will not mistake it for salt or sugar. It goes by several different brand and generic names, but they all have the same formula of 89.75% salt, and 6.25% sodium nitrite, and 4% sodium nitrate (1 pound of salt, plus 1 ounce of sodium nitrite, plus .64 ounce of sodium nitrate).</p> <p>Cure #2 has the same curing and food preservative properties as sodium nitrite, and the extended curing time of sodium nitrate. It is specifically formulated to be used for making uncooked dry cured products that require several weeks to several months to cure. Dry curing meat or sausage properly cannot be done with Cure #1 which contains sodium nitrite only; it dissipates too quickly.</p> <p>Cure #2 can be compared to the time release capsules used in medicines – the sodium nitrites</p>	<p>How to Use: Measures the same as cure #1 (see above).</p> <p>Use as directed, more is not better and it can be toxic. To ensure that the cure is distributed more evenly in your sausage, mix it with the liquid that your recipe calls for, or mix it with the meat prior to grinding.</p> <p>Just as cure #1, when using cure #2 additional salt needs to be added to your sausage. Cure #2 can be used as a dry brine (cure) or in a wet brine (pickle).</p>																																						

	<p>start working immediately, while the sodium nitrates slowly reduce over time into sodium nitrites. Thus allowing for the much longer curing times required to dry cure, which can take up to 6 months. Generally used in such sausages as pepperoni, hard salami, geonoa salami, prosciutto hams, dried farmers sausage, capicola and others that do not require cooking, smoking, or refrigeration.</p> <p>NOTE: This is not interchangeable with cure #1, or by any of the Morton brand name cures. Nor is it interchangeable with sodium nitrate or saltpeter which is measured differently and has different curing times. Also do not mistake this for recipes calling for sodium nitrate or sodium nitrite, which means pure sodium nitrate or pure sodium nitrite.</p>																					
<p>MORTON TENDER QUICK and MORTON SUGAR CURE</p>	<p>NOTE: Morton Tender Quick is not a meat tenderizer, or should either be used as a seasoning. These two premixes are essentially the same, and can be used interchangeably. Both are considered fast cures. The difference between the two is that the Sugar Cure has added dextrose and a packet of spice mix. They both contain a combination of high grade salt, sugar, plus both sodium nitrate (.5%) and sodium nitrite (.5%).</p> <p>Like cure #1, these premix cures have been developed as a cure for meat, poultry, game, fish and sausage that require short curing times, and will be fully cooked. They are NOT interchangeable with cure #1; they measure differently. Unlike cure #1, you don't use any additional salt when making sausage.</p> <p>NOTE: Morton Tender Quick is not a meat tenderizer, and the Sugar cures are not seasonings. These are cures that only should be used in recipes calling for curing meat fish, and poultry. They can be used in recipes that call for cure #1, but because they are measured differently and the salt they contain, they are not directly interchangeable with cure #1, or cure #2, saltpeter or Morton Smoke Flavored Sugar Cure.</p>	<p>Use 1/2 tablespoon (1 1/2 level teaspoons) per pound of ground meat and fat. If replacing Morton Tender Quick for cure #1 in a recipe, do not add the salt that the recipe calls for.</p> <table border="1" data-bbox="1073 989 1432 1388"> <thead> <tr> <th rowspan="2">Amount of Meat/Fat</th> <th colspan="2">Amount of Cure</th> </tr> <tr> <th>Vol.</th> <th>Wt.</th> </tr> </thead> <tbody> <tr> <td>1 lb.</td> <td>1.5 tsp</td> <td>.23 oz.</td> </tr> <tr> <td>5 lbs.</td> <td>7.5 tsp</td> <td>1.15 oz.</td> </tr> <tr> <td>10 lbs.</td> <td>1/4 C + 1 Tbsp</td> <td>2.30 oz.</td> </tr> <tr> <td>15 lbs.</td> <td>1/4C + 3.5 Tbsp</td> <td>3.45 oz.</td> </tr> <tr> <td>25 lbs.</td> <td>3/4 C + 1.5 tsp</td> <td>5.55 oz.</td> </tr> </tbody> </table> <p>tsp= teaspoon; Tbsp= Tablespoon; C= cup; oz.= ounce</p> <p>Spice Packet: If the spices that are included with the Sugar Cures are not desired, it is not necessary to mix the spices with the cure mix. The unspiced Sugar Cure contains the curing agents and may be used alone. When using the spices with your cure combine 1 1/4 teaspoons of spice mix with one cup of cure and mix thoroughly. If any portion of the complete mix with spice is not used within a few days, it</p>	Amount of Meat/Fat	Amount of Cure		Vol.	Wt.	1 lb.	1.5 tsp	.23 oz.	5 lbs.	7.5 tsp	1.15 oz.	10 lbs.	1/4 C + 1 Tbsp	2.30 oz.	15 lbs.	1/4C + 3.5 Tbsp	3.45 oz.	25 lbs.	3/4 C + 1.5 tsp	5.55 oz.
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		<p>should be discarded (once the spices are mixed with the cure the spices will begin to react with the nitrates and nitrites).</p> <p style="text-align: right;">Return to list.</p>
<p>MORTON SMOKE FLAVORED SUGAR CURE</p>	<p>Also know as Morton Sugar Cure Smoke Flavored. This cure premix is not recommended for sausage, but it is listed so that the user does not mistake or confuse this with Morton Sugar Cure (plain). This is a slow cure, and the cure reaction takes longer with Morton Smoke Flavored Sugar Cure than with cure #2 or Morton Sugar Cure (plain) or Morton Tender Quick. This premix is formulated especially for dry curing large cuts of meat like hams, or bacon, that need to be cured over a long period of time.</p> <p>It contains salt, sugar, sodium nitrate (1%), propylene glycol, caramel color, natural hickory smoke flavor, a blend of natural spices and dextrose (corn sugar) - it does not contain sodium nitrite. The smoke flavor and spices comes in a separate package and can be added if the flavor is desired. This cure doesn't have to be mixed with additional salt; and it should not be used for a wet brine (pickle) solution.</p> <p>NOTE: This is not interchangeable with cure #1, or cure #2, or saltpeter or Morton Tender Quick or Sugar Cure (plain).</p>	<p>Follow the instructions that are on the package. The package has a curing chart and a packet of spices that can be mixed with main contents prior to use; if you choose.</p> <p><u>Spice Packet:</u> For directions on how to use the spices in Morton Smoke Flavored Sugar Cures refer to Spice Packet directions in Morton Sugar Cure.</p>