Chapter Fourteen
"I Want Some Methylamine!"

To make MDMA, one absolutely has to have methylamine. Similarly, to make meth from phenylacetone, methylamine is a required chemical. As a result, methylamine has been a hot item with the narco swine since well back in the late seventies. Methylamine now sits on the notorious List I, and is a definite "do not purchase or do business with people who sell it" item.

Through the various editions of *Secrets of Methamphetamine Manufacture*, a procedure taken from Organic Syntheses for making your own methylamine has been given. This procedure is quite practical, and gives reasonably good results. Now other processes will be given that offer advantages of their own, along with their own process specific disadvantages. Pick and choose for the method best suited for your situation.

Method One — The Pipe Bomb

This method is taken from US Patent 2,085,785. It offers good yields of methylamine in a shorter reaction time than that required using the procedure from *Organic Syntheses.*

Also, the chemical glassware "kit" isn't needed to make methylamine by this method. A heavy steel pipe reaction vessel and a heater will make the methylamine. Then a good aspirator for vacuum, and a vacuum evaporation chamber are required to recover the crystals of methylamine hydrochloride.

The method has the further advantage of replacing the formaldehyde used in the *Organic Syntheses* process with methanol. Both of these chemicals are easily available from suppliers of industrial chemicals in both 5 gallon pails and 55 gallon drums, not to mention in smaller amounts from hobbyist mail-order chemical outlets. The difference comes in that methanol (wood alcohol) is even more widely used than formaldehyde. You may even be able to find it on the local hardware store shelf, or get them to order you a pail of it. You just can't pass up hardware store chemicals when they are available. HEET is fairly pure methanol.

Both of these methods use ammonium chloride as the other ingredient to make methylamine. This material is easily available from industrial chemical suppliers in 50 pound bags, and in smaller amounts from "hobbyist'' chemical outlets. A common use for larger quantities is to slow the melting of snow on ski slopes or sled runs. Craft a company name accordingly.

To produce methylamine hydrochloride by this method, one starts with a section of heavy steel pipe of about 2 quart volume. It must be threaded on both ends, and matching screw-on end caps obtained. Steel pipe is generally heavily galvanized with zinc. This must be removed by immersing the pipe and end caps in 5% HCl solution until the initially vigorous fizzing slows to a crawl. Then rinse the pipe thoroughly in clean water to remove residual acid.

Now screw the cap on the bottom of the pipe, and tighten it down with a pipe wrench. It's best to then weld this cap into place.

Next put 400 ml of methyl alcohol (methanol) into the pipe, along with 535 grams of ammonium chloride, 400 ml of water, and 2.5 grams of ferric chloride. This common chemical often comes as a 40% solution in water for industrial waste water treatment purposes. About 5 ml of this solution would be plenty for the purpose. Mix the ingredients thoroughly, then screw on the top cap. Tighten it down with a pipe wrench as well.

The reaction mixture must be heated at 290° C to 300° C for about two hours. To reach this temperature, the same procedure as given in Chapter Seven should be used. A pot filled with solder should be heated until it melts at about 400° F (205° C). The pipe should then be put in the pot, and the temperature of the pot raised to the desired temperature. Maintain this temperature for a couple of hours. A pressure of hundreds of pounds per square inch will develop inside the pipe, so don't hover around it while it cooks.

When the cooking period is over, turn off the heat and remove the pipe from the pot before the solder solidifies. When it is cool, the cap can be removed, and the contents poured into a large filtering flask. The main reaction product is methylamine hydrochloride, along with some unreacted ammonium chloride and methanol, and some dimethylamine hydrochloride byproduct. The ferric chloride catalyst will color the mixture reddish brown.

To get pure methylamine hydrochloride, the mixture should be evaporated under a vacuum. Just stopper the top of the large filtering flask, and apply aspirator vacuum and heat. As the amount of crystals formed during the evaporation gets copious, they should be filtered out and kept in a glass jar with lid. The mother liquor should then be returned to the

filtering flask for more evaporation. This process should be continued until the volume of the mother liquor reaches between 100-200 ml.

Next recrystallize the collected crude crystals of methylamine hydrochloride. This process will remove ammonium chloride, ferric chloride and dimethylamine hydrochloride from them. Clean out the large filtering flask, then put all the collected crystals in it. Add about a quart of 190 proof vodka to the flask, and heat the contents using a boiling hot water bath. Swirl the contents of the flask around as it gets hot. When it is hot, allow the crystals to settle, then decant off the vodka solution into another flask, and filter the vodka out of the settled crystals. Combine the vodka from the decanting and filtering, and cool it down in the freezer. Return the crystals to the filtering flask.

When the vodka gets cold, crystals of pure methylamine will form. Filter them out, and store them in a glass jar with a lid. Return the vodka to the filtering flask to repeat the heating/decanting/filtering/cooling and crystal collecting process. After a few runs through this process, all of the methylamine hydrochloride will be leached out of the ammonium chloride which remains undissolved in the vodka. The ferric chloride will remain dissolved in the vodka, and should stay completely out of the product crystals. Ditto for the dimethylamine, which shouldn't form in enough quantity to reach saturation in the vodka. The yield should be over a pound of methylamine hydrochloride crystals.

It's a good idea to check for the presence of dimethylamine hydrochloride in the product. This is done by taking a sample of the product and placing it in a beaker. Add enough chloroform that a slush is formed. Stir it around for a few minutes, then filter. Allow the chloroform to evaporate away. If crystals form from the chloroform, this is dimethylamine

hydrochloride. If there is a significant amount, the entire product should be rinsed with chloroform.

If a person has difficulty getting ferric chloride, it can be easily made. Take iron or steel filings, and put them in a beaker. Add 15% HCl, about 20 ml per gram of iron, and heat. The iron will dissolve as ferric chloride. One gram of iron will make 3 grams of ferric chloride. If there is any trace of blue or green color in the resultant solution, pass a stream of air through the solution for about ½ hour to oxidize all the iron to the +3 state. The correct solution color is yellow or brownish yellow. Then boil off most all the acid, until the steam no longer gives an acid reaction with pH paper. Some additional water may have to be added to get all the acid out during the boil down. Don't evaporate the liquid completely away, as overheated ferric chloride will decompose.

Method Two — From Methyl Iodide

This method gives satisfying yields of very pure methylamine hydrochloride, but it requires that one have methyl iodide in addition to hexamethylenetetramine. The latter is easily made from formaldehyde and ammonium hydroxide. See *Home Workshop Explosives* in the RDX chapter for the recipe. An additional problem with this recipe is that about a week of reaction time is needed. That aside, it's very easily done and is recommended if the required materials are at hand.

To make methylamine hydrochloride by this method, dissolve 140 grams of hexamethylenetetramine in 1500 ml of 190 proof vodka. It will be necessary to heat the vodka in a hot water bath to get the hexamethylenetetramine to dissolve. As a result, one should choose a reaction vessel which isn't