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Begründet 1877 · Fortgeführt von A. Kossel, F. Knoop und K. Thomas

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The standard preparation of diazomethane involves adding MNNG to a cold 50% aqueous potassium hydroxide solution covered with ether, and then codistilling the diazomethane with the ether.

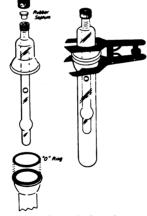


Figure 1. Apparatus for preparing diazomethane \* Z10,100-1 and Z10,102-8

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Diazomethane has been reported to be explosive, particularly on contact with ground glass joints, and so generations of chemists have watched this codistillation with trepidation. We now offer two sets of apparatus which allow safe, more convenient generation of diazomethane either with or without distillation.

The first of these enables the preparation of diazomethane from

MNNG without distillation.<sup>3</sup> Thus, MNNG is placed in the inner chamber and cold ether is introduced into the outer chamber of the apparatus (fig. 1, millimole or micromole size), 5N sodium hydroxide is then injected through the silicon septum onto the MNNG and diazomethane collects in the ether, ready for use. Higher diazoalkanes can be prepared from our other N-alkyl-N'-nitro-N-nitrosoguanidines (ethyl, propyl, butyl, are available), as can their deuterated and tritiated analogs.<sup>4,5</sup> Our Diazald<sup>®</sup> Kit for the generation of diazomethane from Diazald<sup>®</sup> features smooth Clear-Seal<sup>®</sup> joints which avoid the hazards associated with ground glass joints. Deuterated diazomethane is easily prepared using our Deutero Diazald<sup>®</sup> Prep Set which contains instructions and chemicals necessary for generating 50 mmoles of deuterated diazomethane.

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