

The requisite proportions for the generation of Formaldehyde gas, are, by the first method, 1 pint of Formalin to 1 lb. of Permanganate crystals, and by the second method, 1 pt. of Formalin for every thousand cubic feet of space in the room.

Although Formaldehyde is the gaseous disinfectant most commonly used, still there are two others of which mention must be made, viz., Chlorine and Sulphur Dioxide.

In former years before the introduction of Formaldehyde these were the only two gaseous disinfectants known. They are very powerful germicides when properly applied, and undoubtedly have their uses, even at the present day, where the surroundings will permit of their application. The great disadvantage of these two gases is their powerful bleaching properties, and their corrosive action on certain metals. For this reason their use is practically precluded in disinfecting ordinary living rooms; but for such places as out-houses, dairies, milk shops, stables, etc., these gases are eminently suitable—and besides, they are cheap and easily applied. The rooms must be prepared, in the sense that they must be rendered as air-tight as possible, so as to concentrate the gas in the atmosphere. In the case of both these gases, moisture must be present in the air of the room, otherwise no disinfection takes place. The necessary amount of moisture is easily obtained by boiling water in a kettle, or suitable pan, placed in the room; the steam issuing from the kettle permeates the air of the room, and when the walls appear damp, the generation of steam may be stopped, as quite sufficient water vapour will then be present.

Chlorine is generated by placing a definite quantity of Chloride of Lime in a bowl, covering it with a little water, and then adding crude Hydrochloric Acid, when the gas is produced in large quantities. The operator then retires quickly from the room, pasting up the door behind him. The proportions are 1 lb. of Chloride of Lime and 1 pint of Hydrochloric Acid for every thousand cubic feet of space. The disinfecting action of Chlorine is due to the formation of nascent Oxygen when Chlorine comes into contact with water vapour.