How to handle MMS!

**MMS** (=Methyl-methansulfonate, CH$_3$SO$_3$CH$_3$, Mr 110.13) is used in the laboratory for mutagenesis and DNA repair studies. Therefore, it is obvious that MMS is toxic and mutagenic, although it has not been assigned to a toxicity class.

**MMS** is purchased as a liquid solution and stored at 4°C in the refrigerator. You need prior approval by Dr. Heyer to order.

Working with **MMS** requires lab coat, gloves and eye protection by glasses. Pipetting of the concentrated stock solution MUST be done in the designated hood. Pouring of plates MUST be done in the designated hood. Avoid inhalation.

Using **MMS** in liquid cultures requires that the liquid culture is set up in plastic tubes or flasks that no breakage can occur. Mark liquid cultures to indicate that they contain **MMS**. Mark plates to indicate that they contain **MMS**. Put the **MMS** magnet label and your name on the incubator/shaker to indicate that **MMS** cultures/plates are present.

In case of spills involving **MMS** or in case you want deliberately inactivate **MMS**, use an equal volume of cold 10% Na-thiosulfate solution for quenching. In case of contact flush with copious amounts of water and remove contaminated clothing and shoes immediately.

How to handle velvets from MMS plates!

*Always label containers with MMS velvets and keep these velvets separate.*

Collect MMS velvets separately in a bucket with water. When a number accumulates transfer velvets to 10% Na-thiosulfate and put in coldroom over night.

Rinse velvets 10 times in water and autoclave with a liquid cycle for 10-20 min. Rinse and label as MMS velvet. Hand to Dr. Heyer for washing.