

Synthesis of the Terpene Limonene: An Interesting Acid Catalyzed Carbocation Rearrangement of the Terpene, Nerol. Application of GCMS to Structure Determination

Safety

Wear gloves, goggles and aprons at all time in the laboratory. Wear clothing that reasonably covers your legs and feet. Do not come to lab in shorts and or sandals. If you are not dressed appropriately for lab, you must go home and change or possibly wear special plastic booties over your open shoes.

Carry out your reaction in the fume hood. Pull the fume hood door down to an acceptable level.

Nerol is an irritant. Report any significant exposure. If you experience exposure to your skin, remove any interfering clothing and flush the exposed area for fifteen minutes with cool water. If you feel your eyes are burning or you get the material in your eyes, remove contacts and rinse your eyes for fifteen minutes with cool water at one of the eye wash stations. If a significant amount of material spills, report it to your instructor.

Dichloromethane is very toxic. Work in the fume hood. Wear your safety gear. The use of dichloromethane is very limited in this lab, however, you should be very careful in using it. If you feel eyes or skin burning, you should rinse your eyes with cool water for fifteen minutes. If your gloves feel hot or burning take them off and rinse your hands with cool water for fifteen minutes. Change your gloves periodically. Double glove if necessary. Report any significant spills to your instructor.

p-Toluenesulphonic acid is a corrosive, toxic material. You need to be very careful when measuring it out. Wear your safety gear. If you notice any itching or burning of your skin or eyes, remove any interfering clothing or contacts(eyes). Rinse the effected area for fifteen minutes with cool water. If you spill any material on your skin, flush the exposed area for fifteen minutes with cool water. The same instructions apply if you get material in your eye. Remove your contacts and flush eyes at the eyewash station for fifteen minutes with cool water. Notify your instructor of any exposure or spills.

Do not be reluctant to report the smallest accident.