

Diels-Alder Reaction Lab Report

Eric Bittiger

Professor Ghatak

20 April 2023

**Introduction:** Our work was carried out in this facility using the anthracene and malice anhydride Diels Alder reaction. Three py bonds are involved in the Diels-Alders process, a kind of cycloaddition event that results in the formation of a six membered ring. The goal of the experiment is to use the diels-alder reaction between anthracene and malice anhydride to create 9,10-dihydroanthracene-9,10-a,b-succinic anhydride.

**Data, Results and Conclusion:**

		Measured temperature range C°
Mass of anthracene (g)	0.802 g	180°C-195°C
Mass of maleic anhydride (g)	0.409g	
Mass of filter paper (g)	0.32g	
Mass of filter paper and product (g)	1.109 was not done, would've given incorrect weight due to the wet filter paper.	
Mass of product	$0.789\% \times 100 = 7.17$	

Diels reaction, which is the production of unsaturated six-membered rings by the reaction of a conjugated diene and an alkene (dienophile) was used in this experiment to let us to study the interaction between anthracene and malice anhydride. After carefully and continuously heating the anthracene and malice anhydride combination