

PHYSICAL SCIENCES

PAPER 2

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MEMO

peroxide, hydrogen peroxide, and DICCNO₂ show
the effect of concentration on the rate

$\text{H}_2\text{O}_2 + \text{H}^+ + \text{O}_2\text{O}_2$

The apparatus used for this investigation is shown below.

2025



- 01 Explain the term rate of reaction.
- 02 Write down ONE controlled variable for this investigation.

Physical Science Paper June 2memorandum

DJ Losen



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Monthly Catalogue, United States Public Documents ,1970 **Rearming for the Cold War, 1945-1960** Elliott Vanveltner Converse,2012 Book Description The first publication in a multivolume series on the history of the acquisition of major weapon systems by the Department of Defense author Elliott Converse presents a meticulously researched overview of changes in acquisition policies organizations and processes within the United States military establishment during the decade and a half following World War II Many of the changes that shaped the nature and course of weapons research and development production and contracting through the end of the century were instituted between 1945 and 1960 many of the problems that have repeatedly challenged defense policymakers and acquisition professionals also first surfaced during these years This study is the first to combine the histories of the Office of the Secretary of Defense OSD and the military services into one account The volume is organized chronologically with individual chapters addressing the roles of OSD the Army Navy and Air Force in two distinct periods **Federal Register** ,2012-06 **United States Government Publications Monthly Catalog** ,1950 *Prologue* ,1996 **Resources in Education** ,1988-11 I. The Greek school philosophy, with reference to physical science. II. The physical sciences in ancient Greece. III. Greek astronomy. IV. Physical science in the middle ages. V. Formal astronomy after the stationary period. VI. Mechanics, including fluid mechanics. VII. Physical astronomy. Additions to the 3d ed William Whewell,1894 Final Report United States. Advisory Committee on Weather Control,1958 The Chautauquan ,1885 Air Service Information Circular ,1923

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lialh oc ch₃ 3 h 4 benzaldehyde c₆h₅cho ch₂ohch₂oh h step 1 toluene oxidation with kmno₄ kmno₄ is a strong oxidising agent which oxidise toluene to benzaldehyde in 1st step

oxidation of alkylarenes to the corresponding acids using - Dec 07 2022

web may 1 2004 oxidation of toluene using aqueous potassium permanganate was studied under heterogeneous condition in the presence of hydrodynamic cavitation and compared with the results of the reaction under acoustic cavitation

can acidified or neutral kmno₄ oxidise toluene to benzoic acid - Jan 08 2023

web oct 15 2014 1 answer sorted by 6 here are the three equations describing the reduction of manganese and concurrent oxidation of whatever substrate may be present under basic neutral and acidic conditions respectively mnx 7ox4x ex mnx 6ox4x2 basic m n x 7 o x 4 x e x m n x 6 o x 4 x 2 b a s i c

what is the mechanism of toluene oxidation by kmno₄ reddit - Jul 14 2023

web mar 15 2019 what is the mechanism of toluene oxidation by KMnO_4 it is quite simple reaction that KMnO_4 can oxidize benzylic hydrogen in toluene and synthesize benzoic acid however i cannot find exact mechanism of reaction in

oxidation of aromatic alkanes with KMnO_4 to give carboxylic acids - Feb 09 2023

web description treatment of an alkylbenzene with potassium permanganate results in oxidation to give the benzoic acid notes the position directly adjacent to an aromatic group is called the benzylic position the reaction only works if there is a hydrogen attached to the carbon examples

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web may 1 2004 the oxidation of toluene by aq KMnO_4 under hydrodynamic cavitation was taken as a model reaction and various parameters have been optimized the oxidation of toluene by aq KMnO_4 gives benzoic acid scheme 1 KMnO_4 in turn is reduced to MnO_2 the reaction did not give any other byproduct