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#	Chloroform: CHC13 (Trichloromethone):-	
	chiaza	
	form can be prepared by heating ethanol	-
	form can be perposed by heating ethanol or Acetone with bleaching powder paste	T
	from ethanol :- It involves tollowing reaction	
0	Libreration of chlorine's	
	Caoc12+ H20 A , C12+ Ca(OH)2	
	Bleaching	
(10)	Onidation of ethanol:	
	CHO-(H2-0H+ (12 C, CHO-(H0+2He)	
(II)	chlorination of ethanal:	
	CHO - CHO + 13010 A; CC12-CHO+3HU	
	Chloralimporter)	
		1



(1)	Formation of chlosoform?
	2 CC13-C1+20 + ca(0H)2 0,3 CHC17+ (Hcogga
1:#	· From aceton
0	Liberation of chlorine:
	Caoc12 + H20 D, C12+ Ca(OH)2
0	Chlorination of acetoni-
(h)	Enomation of chlosoform!
	2 CH3-2- cc13 + ca (a (OH)2 D, 2 (HC13+
*	(CH3-(00)2(e
*	physical properties of chloroform.
	Chloroform (e Helz) is colourless liquid with
@ ③	Charactistics sweet smell. At's boiling point is 61°c. At is insoluble in water.

* chemical properties of chloroform.

O onidation:

when Chloroform (CHC13) is
enposed to atmospheric all in presence of
southight, It omidize to a poisonous
compound called phosgene so, Chloroform is
not used for anaesthetic purpose

cl
H-c-cl+02 hv, 0=c + Hcl
cl
phosgene.
(Carbony i chloride)

Reaction with conc. HNO2

(1

(1-C-H + Corc. HNOS -1-C-NO2 + H20

(1

chloro picrin

@ Reaction with acctone

(Ho- ¿- (Ho + H- cc) alkali, (Ho- ¿- (Ho

. Chloretone.

5

H

TT

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(4) Reaction with silver powder: 2 CHC12+ 6A9 A CHECH+6Agel acetylene MOH : 2 (HX3 + 6 A) A, (H= CH + 6 A) X Hab borm @ Reaction with agreeous alkali' (hydrolysis): when chloroform is treated with aqueous alkali like KOH, potassium formate (HOOK is formed which as acidification is gives tormic and. H-C-01 + 3100Haques -3100 0H. * unstable + HOOSH C HT H10016 (160) A - C = 0 Potassium formale - Hzo 0'H 07 (pota csium methonoale) HCOOH toomic and (methoroic acd)

(6)	Reduction	
	When chlosoform is reduce with	1
	zinc and hydrochlosic acid to dichloso	
	methane is formed	
		3
	Chert Teche Strict	<i>A</i> .
	_	u
	13ch of Chiosotorm is reduced with zing	1
	dust and water, methane is formed.	
	CH(13 + 6[H] zn(du1+)+ H20, (H4+3H1)	
h		
19	carbylamine reaction (Isocyanide test reaction)	20
#	is heated with chloroform and alcoholic alkali,	
	is heated with offersive smell is formed:	
	This reaction is not shown by secondary	
	and tertiary amine so it is used as test	
	for primary anny	
	R-NH2+(H113+ 3KOH(a1c.) A, R-NC+ 3K11+3H20	
	i-amine	
	(Hg-CH2-NH2+ (HC15+ DKOHaic) 1 (Hg-(H2-Ne + 31ce	1
	Ethylisocyanide + 3 Hes	-
	NH2 Ethanel maitaile	
	Ne Ne	
	(O) + CH(1) + 316014 (4111) 1 (O) + 316 11 + 3148 0	-
	pnery 1 isowanide	Ì

