2.1.1. Introduction

Antiseptics are applied on living tissues or skin because their antimicrobial activity helps in reducing the risk of infection, sepsis, or putrefaction. Antiseptics are different from antibiotics and disinfectants because antibiotics get transported by the lymphatic system and destroy the bacteria within the body and disinfectants kill the microbes on non-living articles. Some antiseptics are bactericidal (i.e., can destroy microbes) while others are bacteriostatic (i.e., can prevent their growth).

Disinfectants are agents which can act as a germicide and destroy microbic life. In hospitals and healthcare settings, antiseptics and disinfectants are commonly used for applying topically or on hard surfaces. These products contain many active chemical agents (biocides) such as alcohols, phenols, iodine, and chlorine. Biocides show broad spectrum antimicrobial activity but their mode of action is not as clear as that of antibiotics.

2.1.2. Classification

Antiseptics and disinfectants are classified as in the table 2.1:

Table 2.1: Some Examples of Antiseptics and Disinfectants Along with their Applications

	The state of the state of	Applications	
Classes	Names	Structures	Applications
Alcohols	Ethanol	CH ₃ —CH ₂ OH	Antisepsis,
	Isopropanol	CH ₃ CHOH CH ₃	Disinfection, Preservation
Aldehydes	Gluteraldehyde	CHOCH ₂ CH ₂ CH ₂ CHO	Disinfection,
	Formaldehyde	НСНО	Preservation, Sterilisation
Anilides	Triclocarbon	CI—NH—CO—NH—CI	Antisepsis
Phone I		CI NH CO NH CI	A CONTRACTOR
Phenols	Phenol	ОН	Antisepsis, Disinfection, Preservation

	Thymol	H ₃ C	-
		нс СН3	MARTIN
		""	13
		H ₃ C	-
			The same
	o, p, and m- Cresol) —он	
	Clesor		The state of
	ERRELL	CH ₃	The same of
	Resorcinol	ОН	The state
	mark mind		The Marita
	of the original	and and an in the second	TATOM VENUE
1000	district the same of	но	The surganity
DECEMBER	Chloroxylenol	H ₃ C	The state of the state of
m Right			1 0 7 7 3 3 7 3
115 17 3	in the fact of	CI—OH	
		CI OII	
		The state of the s	
pethones :	enterio luna so	H ₃ C	The state of
Bisphenols	Triclosan	CI HO	Antisepsis,
Dispitchois	Tire to dai		Antiplaque,
	les les les		Deodorants,
	The second second	CI CI	Preservation
1 1 1 1 1			
	Hexachlorophe	OH H ₂ OH	i ti
	ne	CI CI CI	
	3-4-30	YYY	
North th	d guold sinais	Steel Day 37 House to a proper to be	100
		CI CI	The same of
STATE OF THE PARTY		BONE TO SERVICE STATE OF THE S	1 1000
		Cl Cl	
Biguanides	Chlorhexidine	NH NH	Antisepsis,
		CI-NH-C-NH-C	Antiplaque, Disinfection
			Preservation
		(CH ₂) ₆	! I Court in a court
		CI-C-NH-C-NH	
		NH NH	
	ARTHUR		
Amidines	Propamidine	TIN (Antisepsis,
Lillianich	Paritionic	H ₂ N	Preservation
			the same of the sa
		HN _	Bi Galoros
		HN (CH ₂) _n	Si dome
		HN C $(CH_2)_n$ C	Si dans
		(C11)/n	

Halogen Releasing Agents	Chlorine compounds - Hypochlorous acid	HOCI	Antisepsis, Disinfection, Cleansing
	Choramine	H ₃ C S NHCI	
	Iodine compounds - Iodine	I ₂	
	Povidone iodine	CHCH ₂ — N O N O N O N N O N	
	Bromine compounds - Dibromine	HN Br	
Heavy Metals	Mercury compounds - Mercuric chloride Thiomersal	HgCl ₂	Antisepsis, Preservation, Disinfection
	Silver compounds - Silver nitrate	SHgC ₂ H ₅ AgNO ₃	
	Silver sulphadiazine	H_2N SO_2N N N	
	Zinc compounds -	Table - I must	
1199	Zinc sulphate	ZnSO ₄	
One	Zinc oxide	ZnO	Di i c ii
eroxygens	Hydrogen peroxide	$ m H_2O_2$	Disinfection, Sterilisation
	Ozone	O ₃	THE PROPERTY.
	Peracetic acid	CH ₃ COOOH	canned by Ca

Quaternary Ammonium Compounds	Cetrimide	H ₃ C CH ₃ Br Antisepsis, Preservation, Disinfection, Cleansing
	Benzalkonium chloride	$\begin{bmatrix} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & $
Dyes	Triphenylmeth ane dyes - Gentian violet	(CH ₃) ₂ N(CH ₃) ₂
	Basic Fuchsine	N(CH ₃) ₂ NH ₃ CI CH ₃ NH ₂
	Thiazine dyes - Methylene blue	Calle of Paris Manager of the Contract of the
	Acridine dyes - Proflavin	H ₂ N NH ₂ NH ₂
econodina - National		CH ₃