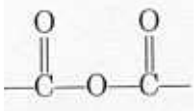
TABLE A.2 Classification of Functional Groups for Purposes of Nomenclature[a]

Functional-group class	Structure	Name when used as suffix	Name when used as prefix
Principal groups			
Carboxylic acids	—COOH	-oic acid -carboxylic acid	carboxy
Carboxylic anhydrides		-oic anhydride -carboxylic anhydride	
Carboxylic esters	—COOR	-oate -carboxylate	alkoxycarbonyl
Acid halides	—COCl	-oyl halide carbonyl halide	halocarbonyl
Amides	—$CONH_2$	-amide -carboxamide	carbamoyl
Nitriles	—C≡N	-nitrile -carbonitrile	cyano
Aldehydes	—CHO	-al -carbaldehyde	formyl
			oxo
Ketones	=O	-one	oxo
Alcohols	—OH	-ol	hydroxy
Phenols	—OH	-ol	hydroxy
Thiols	—SH	-thiol	mercapto
Amines	—NH_2	-amine	amino
Imines	=NH	-imine	imino
Alkenes	C=C	-ene	alkenyl
Alkynes	C≡C "infix"	-yne	alkynyl
Alkanes	C—C	-ane	alkyl
Subordinate groups			
Ethers	—OR		alkoxy
Sulfides	—SR		alkylthio
Halides	—F, —Cl, —Br, —I		halo
Nitro	—NO_2		nitro
Azides	N=N=N		azido
Diazo	=N=N		diazo

[a]Principal functional groups are listed in order of decreasing priority, but the subordinate functional groups have no established priority order. Principal functional groups may be cited either as prefixes or as suffixes; subordinate functional groups may be cited only as prefixes.