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Sections A, B, C, D, E, F and H

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INTRODUCTION TO THE IUPAC REVISED AND COLLECTED RECOMMENDATIONS FOR THE NOMENCLATURE OF ORGANIC CHEMISTRY, 1978

The progress of the IUPAC Commission on the Nomenclature of Organic Chemistry during the period 1969 to 1977 has been reported in the Comptes Rendus of the Conferences (Recommended Rules) or in the Information Bulletin of the Union, Appendices on Provisional Nomenclature, Symbols, Units and Standards (Provisional Rules). While work for improving and completing nomenclature rules continues, we have now reached the point where it is possible and convenient to collect in a single volume a compendium of existing recommendations providing improved guidance to internationally agreed nomenclature.

The Sections included in this compendium are :

Section A. Hydrocarbons

Section B. Fundamental Heterocyclic Systems

Section C. Characteristic Groups containing Carbon, Hydrogen, Oxygen, Nitrogen, Halogen, Sulfur, Selenium and/or Tellurium

These Rules are the IUPAC Organic Nomenclature Rules Sections A, B and C, 1969, reprinted from the combined edition, Butterworths, London (1971), corrected for material errors.

Section D. Organic Compounds containing elements that are not exclusively Carbon, Hydrogen, Oxygen, Nitrogen, Halogen, Sulfur, Selenium and Tellurium.

These Rules are issued jointly by the Organic and Inorganic Nomenclature Commissions, and were published originally in IUPAC Information Bulletin, Appendix No.31, August 1973. Corrections for material errors and a few revisions have been introduced into the provisional text after evaluation of comments.

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Section E. Stereochemistry

These Rules are IUPAC Recommendations 1974 and are reprinted from *Pure and Applied Chemistry*, Vol. 45, pp. 11-30 (Pergamon, 1976) with a few corrections for material errors.

Section F. General Principles for the Naming of Natural Products and Related Compounds

These Rules have not been finally approved, but their inclusion here seems appropriate (some minor errors have been corrected).

Section H. Isotopically Modified Compounds

These Rules, now approved, were originally published in the IUPAC Information Bulletin, Appendix No. 62, July 1977. Corrections for material errors have been introduced after evaluation of comments.

Although the titles of these Sections are to a large extent self-explanatory, it is thought useful here to make some comments on the arrangement of material. Glossaries of terms used are to be found in the Introduction to the 1969 Rules, p. xviii and in Section C, p. 81.

The attention of a reader having a nomenclature problem to solve is drawn first to Section C, which deals initially with general principles for the construction of a name. The operations described in this Section are usually to be applied to the names for hydrocarbons and heterocyclic systems provided by application of the Rules in Sections A and B.

Section D contains various types of material (see contents pp. ix-xii), some of which would be more appropriately included in earlier sections ; for example, much of Rules D-1 (Nomenclature Systems, p. 326), D-4 (Chains and Rings with Regular Patterns of Heteroatoms, p. 373), D-6 and D-7 (Organosilicon and Organoboron Compounds, pp. 409-458), and the Appendix Tables I, II and IV (pp. 459-471) falls into this category. We hope to reorganise the subject matter in a later edition.

INTRODUCTION TO 1969 EDITION OF SECTIONS A, B AND C

The first international proposals on the nomenclature of organic chemistry, made at Geneva in 1892, were revised and extended by the Definitive Report of the Commission for the Reform of Nomenclature in Organic Chemistry of the International Union of Chemistry (I.U.C.) which appeared after the meeting at Liège in 1930 (Liège Rules), and was supplemented by less extensive reports from the meetings at Lucerne in 1936 and at Rome in 1938. Although these proposals rendered great service, it was apparent at the meeting of the International Union of Pure and Applied Chemistry (I.U.P.A.C.) at London in 1947 that extension and revision of the nomenclature rules for organic chemistry were required.

Those who have served on the Commission on the Nomenclature of Organic Chemistry for varying periods from 1947 to 1969 are M. Betti*, R. S. Cahn, L. T. Capell, L. C. Cross, G. Dupont*, G. M. Dyson, C. S. Gibson*, H. Grunewald, G. Kersaint, S. P. Klesney, K. L. Loening, N. Lozac'h, R. Marquis*, A. D. Mitchell*, H. S. Nutting, A. M. Patterson*, V. Prelog, F. Richter*, J. Rigaudy, S. Veibel, P. E. Verkade, and E. Votoček*, and, as observers, K. A. Jensen (chairman, I.U.P.A.C. Commission on the Nomenclature of Inorganic Chemistry), W. Klyne (member of the IUPAC/IUB Commission for Biochemical Nomenclature).

The Commission's progress in the period 1947 to 1969, inclusive, has been reported in successive issues of the *Comptes Rendus* of the Conferences of the Union. Relevant parts of those reports are included, with a few revisions, in the rules which form the body of this publication.

Comments on these rules should be sent to the Secretary, S. P. Klesney, 3609 Boston, Midland, Michigan 48640, U.S.A. or to any other member of the Commission.

GENERAL PRINCIPLES

The Commission believes that differences in nomenclature frequently hinder the accurate and intelligible conveyance of information from one chemist to another, so tending to hamper understanding and progress. The Commission urges conformity with internationally agreed nomenclature even when this nomenclature may not seem the best possible from the point of view of the chemists of a particular nation or group.

The rules now presented are intended to be suitable for textbooks, journals and patents, for lexicons and similar compilations, and for indexes, even if not always wholly so for conversation or lectures. The rules will be issued in parts, as they become approved by the Union. They constitute recommendations for the naming of types of compounds and of individual compounds. They are not exhaustive, except in specified cases. Where, for various reasons, limitation to a single method of nomenclature appears undesirable or impossible, alternatives are given; but the Commission hopes that elimination of alternatives may become acceptable as the merits of one method become more generally recognized. The Commission hopes also that each nation will try to reduce the variations in nomenclature with regard to spelling, the position of numbers, punctuation, italicizing, abbreviations, elision of vowels, certain terminations, and so forth; the

* Deceased.

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present rules are not to be held as making recommendations in these matters.

Owing to the very extensive nomenclature which has come into being since the last revision, the Commission has, in the main, confined its efforts to codifying sound practices which already existed, rather than to originating new nomenclature—the latter may form a later stage of the Commission's activities.

In so doing, the Commission had in mind the following main principles: (a) as few changes as possible should be made in existing nomenclature, though utility is more important than priority; (b) rules and names should be unequivocal and unique, but simple and concise; (c) records in journals, abstracts, compendia, and industry should be used to assess the relative extent of past use of various alternatives; (d) rules should be consistent with one another, yet aid expression in the particular field of chemistry involved and be capable of extension with the progress of science; (e) trivial names, and names having only a very small systematic component, cannot be eliminated when in very common use, but those of less value should be replaced by systematic (or at least more systematic) ones, and the creation of new trivial names should be discouraged by provision of extensible systematic nomenclature; (f) names should be adaptable to different languages. The Commission is aware that acceptance of its recommendations depends in large measure on the success which has attended its attempts to assess, for each particular case, the relative merits of these often conflicting claims.

GLOSSARY

The Commission considered it unnecessary to define chemical terms in common use. However, certain terms which have special meaning in nomenclature merit brief description; namely:

Parent compound: the principal chain or ring system from which a name is derived by substitution of hydrogen with other atoms or groups; e.g. methylcyclohexane has cyclohexane as its parent.

Systematic name: a name composed wholly of specially coined or selected syllables, with or without numerical prefixes; e.g., pentane, oxazole.

Trivial name: a name no part of which is used in a systematic sense; e.g., xanthophyll.

Semi-systematic name or semi-trivial name: a name of which only a part is used in a systematic sense; e.g., methane (-ane), butene (-ene), calciferol (-ol). (Most names in organic chemistry belong to this class.)

Substitutive name: a name involving replacement of hydrogen by a group or by another element; e.g., 1-methylnaphthalene, 1-pentanol.

Replacement name: an "a" name, where C, CH, or CH₂ is replaced by a hetero atom; e.g., 2,7,9-triazaphenanthrene. Also, certain names

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involving thio- (also seleno- or telluro-) to indicate replacement of oxygen by sulfur (or selenium or tellurium, respectively); *e.g.*, thiopyran.

Subtractive name: a name involving removal of specified atoms; *e.g.*, in the aliphatic series names ending in -ene or -yne. Also names involving anhydro-, dehydro-, deoxy-, *etc.*, or nor-.

Radicofunctional name: a name formed from the name of a radical and the name of a functional class; *e.g.*, acetyl chloride, ethyl alcohol.

Additive name: a name signifying addition between molecules and/or atoms; *e.g.*, styrene oxide.

Conjunctive name: a name formed by placing together the names of two molecules, it being understood that the two molecules are linked by loss of one hydrogen atom from each; *e.g.*, naphthaleneacetic acid.

Fusion name: a name for a cyclic system formed by use of a linking "o" between the names of two ring systems, denoting that the two systems are fused by two or more common atoms; *e.g.*, benzofuran.

Hantzsch-Widman name: a name for a heterocyclic system, derived from the original proposals of Hantzsch and Widman, and formed from a prefix or prefixes (to denote one or more hetero atoms) and a suffix -ole or -ine (to denote a five- or a six-membered ring, respectively); *e.g.*, triazole, thiazole.

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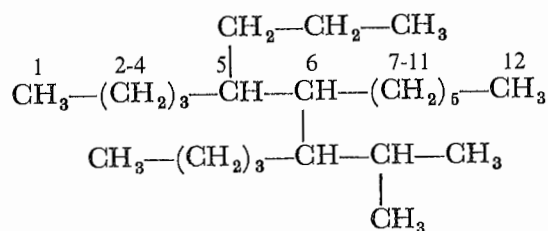
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(d) The chain having the least branched side chains.

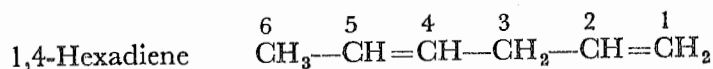
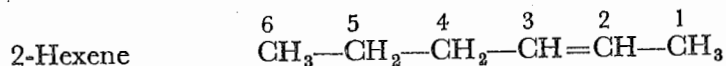


6-(1-Isopropylpentyl)-5-propyldodecane

Rule A-3. Unsaturated Compounds and Univalent Radicals

3.1—Unsaturated unbranched acyclic hydrocarbons having one double bond are named by replacing the ending “-ane” of the name of the corresponding saturated hydrocarbon with the ending “-ene”. If there are two or more double bonds, the ending will be “-adiene”, “-atriene”, *etc.* The generic names of these hydrocarbons (branched or unbranched) are “alkene”, “alkadiene”, “alkatriene”, *etc.* The chain is so numbered** as to give the lowest possible numbers to the double bonds. When, in cyclic compounds or their substitution products, the locants of a double bond differ by unity, only the lower locant is cited in the name; when they differ by more than unity, one locant is placed in parentheses after the other (see Rules A-31.3 and A-31.4).

Examples:



The following non-systematic names are retained:



* Here the choice lies between two possible main chains of equal length, each containing six side chains in the same positions. Listing in increasing order, the number of carbon atoms in the several side chains of the first choice as shown and of the alternate second choice results as follows:

first choice	1, 1, 1, 2, 8, 8
second choice	1, 1, 1, 1, 8, 9

The expression, “the greatest number of carbon atoms in the smaller side chains”, is taken to mean the largest side chain at the first point of difference when the size of the side chains is examined step by step. Thus, the selection in this case is made at the fourth step where 2 is greater than 1.

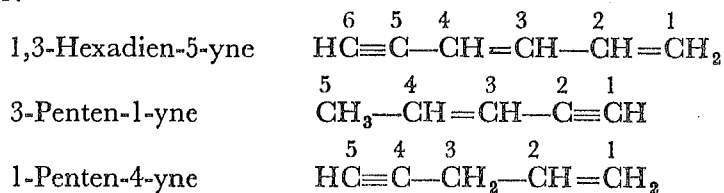
**Only the lower locant for a double bond is cited in the name of an acyclic compound.

3.2—Unsaturated unbranched acyclic hydrocarbons having one triple bond are named by replacing the ending “-ane” of the name of the corresponding saturated hydrocarbon with the ending “-yne”. If there are two or more triple bonds, the ending will be “-adiyne”, “-atriyne”, *etc.* The generic names of these hydrocarbons (branched or unbranched) are “alkyne”, “alkadiyne”, “alkatriyne”, *etc.* The chain is so numbered as to give the lowest possible numbers to the triple bonds. Only the lower locant for a triple bond is cited in the name of a compound.

The name “acetylene” for $\text{HC}\equiv\text{CH}$ is retained.

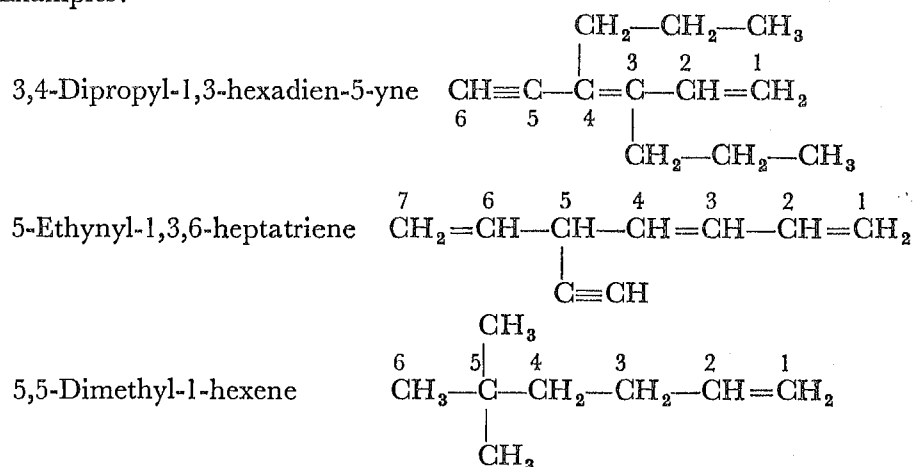
3.3—Unsaturated unbranched acyclic hydrocarbons having both double and triple bonds are named by replacing the ending “-ane” of the name of the corresponding saturated hydrocarbon with the ending “-enyne”, “-adienyne”, “-atrienyne”, “-enediyne”, *etc.* Numbers as low as possible are given to double and triple bonds even though this may at times give “-yne” a lower number than “-ene”. When there is a choice in numbering, the double bonds are given the lowest numbers.

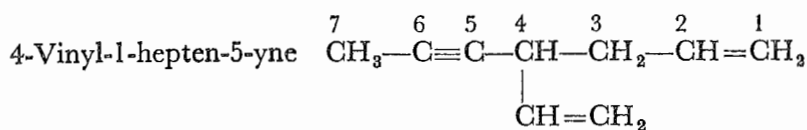
Examples:



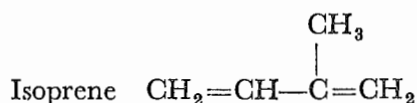
3.4—Unsaturated branched acyclic hydrocarbons are named as derivatives of the unbranched hydrocarbons which contain the maximum number of double and triple bonds. If there are two or more chains competing for selection as the chain with the maximum number of unsaturated bonds, then the choice goes to (1) that one with the greatest number of carbon atoms; (2) the number of carbon atoms being equal, that one containing the maximum number of double bonds. In other respects, the same principles apply as for naming saturated branched acyclic hydrocarbons. The chain is so numbered as to give the lowest possible numbers to double and triple bonds in accordance with Rule A-3.3.

Examples:



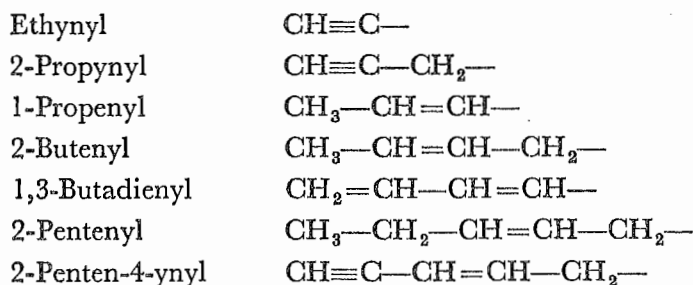


The following name is retained for the unsubstituted compound only:



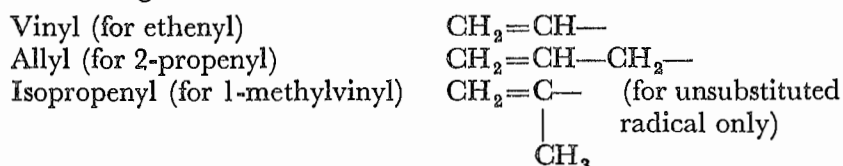
3.5—The names of univalent radicals derived from unsaturated acyclic hydrocarbons have the endings “-enyl”, “-ynyl”, “-dienyl”, *etc.*, the positions of the double and triple bonds being indicated where necessary. The carbon atom with the free valence is numbered as 1.

Examples:



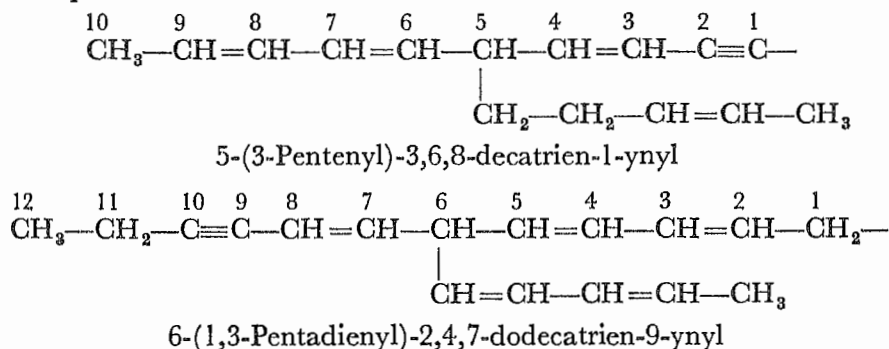
Exceptions:

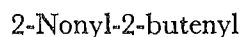
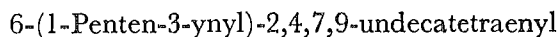
The following names are retained:



3.6—When there is a choice for the fundamental chain of a radical, that chain is selected which contains (1) the maximum number of double and triple bonds; (2) the largest number of carbon atoms; and (3) the largest number of double bonds.

Examples:





4.1—Bivalent and trivalent radicals derived from univalent acyclic hydrocarbon radicals whose authorized names end in “-yl” by removal of one or two hydrogen atoms from the carbon atom with the free valences are named by adding “-idene” or “-idyne”, respectively, to the name of the corresponding univalent radical. The carbon atom with the free valence is numbered as 1.

Examples:

Methyldiyne*	$\text{CH}\equiv$
Ethylidene	$\text{CH}_3\text{—CH=}$
Ethylidyne	$\text{CH}_3\text{—C}\equiv$
Vinylidene	$\text{CH}_2=\text{C=}$
Isopropylidene†	$(\text{CH}_3)_2\text{C=}$

4.2—The names of bivalent radicals derived from normal alkanes by removal of a hydrogen atom from each of the two terminal carbon atoms of the chain are ethylene, trimethylene, tetramethylene, *etc.*

Examples:

Pentamethylene $-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-$
 Hexamethylene $-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-$

Names of the substituted bivalent radicals are derived in accordance with Rules A-2.2 and A-2.25.

Example:

Ethylethylene

$$\begin{array}{c} \text{2} \qquad \text{1} \\ -\text{CH}_2-\text{CH}- \\ | \\ \text{CH}_2-\text{CH}_3 \end{array}$$

The following name is retained:

Propylene $\text{CH}_3\text{—CH—CH}_2\text{—}$

† For unsubstituted radical only.

**Rule D-4.14 introduces an alternate method of naming radicals derived from any position of unbranched chains or ring systems by adding “-yl”, “-diyl”, “-triy”, *etc.* to the name of the chain or ring system with elision of “e” before “-yl”. Examples: 2-pentanyl $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-}\dot{\text{C}}\text{H-CH}_3$; 1,6-hexanedyl $\text{-CH}_2\text{-(CH}_2\text{)}_4\text{-CH}_2\text{-}$.

LIST OF RADICAL NAMES

This list is compiled from Sections A, B, and C of the Rules. It includes, besides organic radicals, substituents such as halogens, oxo, amino, nitro, whose names are laid down in the Rules of these Sections.

Composite radicals will usually be found under methane, methyl, acetyl, benzene, phenyl, or cyclohexane (for example, methylthio, acetylimino, cyclohexanecarbonyl), but some other important examples as well as exceptions to the systematic rules are also listed.

The Rules cited in the third column are the principal references but are not to be considered as necessarily an exhaustive list.

Except at the point(s) of attachment, decimal points are used for brevity, in place of lines to denote single bonds, and colons to denote double bonds.

Radical name	Formula	Based on rule no.
Aceanthrenyl	$C_{10}H_{11}-$	A-23.1, A-24.2
Aceanthrylenyl	$C_{10}H_9-$	A-21.1, A-24.2
Acenaphthenyl	$C_{12}H_9-$	A-23.1, A-24.2
Acenaphthenylene	$-C_{12}H_8-$	A-21.3, A-24.4
Acenaphthenylidene	$C_{12}H_8=$	A-23.1, A-24.3
Acenaphthylenyl	$C_{12}H_7-$	A-21.1, A-24.2
Acephenanthrenyl	$C_{16}H_{11}-$	A-23.1, A-24.2
Acephenanthrylenyl	$C_{16}H_9-$	A-21.1, A-24.2
Acetamido	$CH_3 \cdot CO \cdot NH-$	C-823.1
Acetimido	$CH_3 \cdot C(:NH)-$	C-451.2
Acetoacetyl	$CH_3 \cdot CO \cdot CH_2 \cdot CO-$	C-416.3
Acetohydrazonoyl	$CH_3 \cdot C(:N \cdot NH_2)-$	C-451.2
Acetohydroximoyl	$CH_3 \cdot C(:N \cdot OH)-$	C-451.2
Acetonyl	$CH_3 \cdot CO \cdot CH_2-$	C-318.1
Acetonylidene	$CH_3 \cdot CO \cdot CH=$	C-318.1
Acetoxy	$CH_3 \cdot CO \cdot O-$	C-463.3
Acetyl (<i>preferred to ethanoyl</i>)	$CH_3 \cdot CO-$	C-404.1
Acetylamino	$CH_3 \cdot CO \cdot NH-$	C-823.1
Acetylhydrazino (<i>N'</i> - or 2- shown)	$CH_3 \cdot CO \cdot NH \cdot NH-$	C-921.5
Acetylimino	$CH_3 \cdot CO \cdot N=$	C-815.3
Acridinyl	$NC_{13}H_9-$	B-2.11, B-5.11
Acryloyl (<i>preferred to propenoyl</i>)	$CH_2:CH \cdot CO-$	C-404.1
Adipoyl (<i>preferred to hexanedioyl</i>)	$-CO \cdot [CH_2]_4 \cdot CO-$	C-404.1
Alanyl	$CH_3 \cdot CH(NH_2) \cdot CO-$	C-421.1
β -Alanyl	$H_2N \cdot CH_2 \cdot CH_2 \cdot CO-$	C-421.1
Allophanoyl	$NH_2 \cdot CO \cdot NH \cdot CO-$	C-971.2
Allyl (<i>preferred to 2-propenyl</i>)	$CH_2:CH \cdot CH_2-$	A-3.5
Allylidene	$CH_2:CH \cdot CH=$	A-3.5, A-4.1
Allyloxy	$CH_2:CH \cdot CH_2 \cdot O-$	C-205.1
Amidino (<i>replacing guanlyl</i>)	$H_2N \cdot C(:NH)-$	C-951.4
Amino	NH_2-	C-811.3, C-812.2
Aminomethyleneamino	$H_2N \cdot CH:N-$	C-951.4
Aminooxy	$H_2N \cdot O-$	C-841.2
Ammonio	$+H_3N-$	C-82.1, C-85, C-87.1, C-816.3
amyl, <i>see</i> Pentyl		
Anilino	$C_6H_5 \cdot NH-$	C-811.4
Anisidino (<i>o</i> -, <i>m</i> -, or <i>p</i> -)	$CH_3O \cdot C_6H_4 \cdot NH-$	C-811.4
Anisoyl (<i>o</i> -, <i>m</i> -, or <i>p</i> -) (<i>preferred to methoxybenzoyl</i>)	$CH_3O \cdot C_6H_4 \cdot CO-$	C-411.1

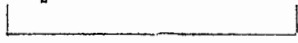
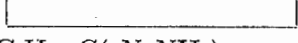
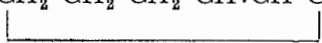
LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Anthraniloyl	$o\text{-NH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{CO}-$	C-404.1, C-421.4
Anthryl	C_{14}H_9-	A-24.2
Anthrylene	$-\text{C}_{14}\text{H}_8-$	A-24.4
Arginyl	$\text{NH}_2 \cdot \text{C}(:\text{NH}) \cdot \text{NH} \cdot [\text{CH}_2]_3 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1
Asparaginylyl	$\text{NH}_2 \cdot \text{CO} \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.3
Aspartoyl	$-\text{CO} \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.3
α -Aspartyl	$\text{HO}_2\text{C} \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.3
β -Aspartyl	$\text{HO}_2\text{C} \cdot \text{CH}(\text{NH}_2) \cdot \text{CH}_2 \cdot \text{CO}-$	C-421.3
Atropoyl (<i>preferred to 2-phenylpropenoyl</i>)	$\text{C}_6\text{H}_5 \cdot \text{C}(:\text{CH}_2) \cdot \text{CO}-$	C-404.1
Azabicyclo[2.2.1]heptyl	$\text{NC}_6\text{H}_{10}-$	B-4.1, B-5.21
Azelaoyl (<i>unsubstituted only</i>)	$-\text{CO} \cdot [\text{CH}_2]_7 \cdot \text{CO}-$	C-404.1
Azi	$-\text{N}:\text{N}-$ (to a single atom)	C-931.5
Azido	N_3-	C-10.1, C-941.1
Azino	$=\text{N} \cdot \text{N} =$	C-923.1
Azo	$-\text{N}:\text{N}-$	C-911, C-912
Azoxy	$-\text{N}(\text{O}) \cdot \text{N}-$	C-913.1
Azulenyl	C_{10}H_7-	A-21.1, A-24.2
Benzamido	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{NH}-$	C-823.1
Benzeneazo	$\text{C}_6\text{H}_5 \cdot \text{N}:\text{N}-$	C-911.2, C-911.3
Benzeneazoxy	$\text{C}_6\text{H}_5 \cdot \text{N}_2\text{O}-$	C-913.1
benzenecarbonyl, <i>see</i> Benzoyl		
1,2-benzenedicarbonyl, <i>see</i> Phthaloyl		
1,3-benzenedicarbonyl, <i>see</i> Isophthaloyl		
1,4-benzenedicarbonyl, <i>see</i> Terephthaloyl		
Benzenesulfinyl	$\text{C}_6\text{H}_5 \cdot \text{SO}-$	C-631.1
Benzenesulfonamido	$\text{C}_6\text{H}_5 \cdot \text{SO}_2 \cdot \text{NH}-$	C-631.1, C-641.7, C-823.1
Benzenesulfonyl	$\text{C}_6\text{H}_5 \cdot \text{SO}_2-$	C-631.1
Benzenesulfonylamino	$\text{C}_6\text{H}_5 \cdot \text{SO}_2 \cdot \text{NH}-$	C-823.1
Benzenetriyl	$\text{C}_6\text{H}_3<$	A-24.4
Benzhydryl (<i>alternative to Diphenylmethyl</i>)	$(\text{C}_6\text{H}_5)_2\text{CH}-$	A-13.3
Benzhydrylidene (<i>alternative to Diphenylmethylene</i>)	$(\text{C}_6\text{H}_5)_2\text{C} =$	A-13.4
Benzidino	$p\text{-NH}_2 \cdot \text{C}_6\text{H}_4 \cdot \text{C}_6\text{H}_4 \cdot \text{NH}-$	C-811.4, C-813.1
Benziloyl (<i>preferred to 2-hydroxy-2,2-diphenylethanoyl</i>)	$(\text{C}_6\text{H}_5)_2\text{C}(\text{OH}) \cdot \text{CO}-$	C-411.1
Benzimidazolyl	$\text{N}_2\text{C}_7\text{H}_5-$	B-3, B-5.11
Benzimidoyl	$\text{C}_6\text{H}_5 \cdot \text{C}(:\text{NH})-$	C-451.2
Benzofuranyl	OC_8H_5-	B-3, B-5.11
Benzopyranyl	OC_9H_7-	B-3, B-5.11
Benzoquinonyl (1,2- or 1,4-)	$(\text{O}:)_2\text{C}_6\text{H}_3-$	C-317.2
Benzo[b]thienyl (<i>replacing thianaphthenyl</i>)	SC_8H_5	B-2.11, B-5.11
Benzoxazinyl	ONC_8H_6-	B-3, B-5.11
Benzoxazolyl	ONC_7H_4-	B-3, B-5.11
Benzoyl (<i>preferred to benzenecarbonyl</i>)	$\text{C}_6\text{H}_5 \cdot \text{CO}-$	C-404.1
Benzoylamino	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{NH}-$	C-823.1
Benzoylhydrazino (<i>N'- or 2-shown</i>)	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{NH} \cdot \text{NH}-$	C-921.5
Benzoylimino	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{N} =$	C-815.3
Benzoyloxy	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{O}-$	C-463.3
Benzyl	$\text{C}_6\text{H}_5 \cdot \text{CH}_2-$	A-13.3
Benzylidene	$\text{C}_6\text{H}_5 \cdot \text{CH} =$	A-13.4
Benzylidyne	$\text{C}_6\text{H}_5 \cdot \text{C} \equiv$	A-13.4

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Benzyloxy	$C_6H_5 \cdot CH_2 \cdot O-$	C-205.1
Benzyloxycarbonyl	$C_6H_5 \cdot CH_2 \cdot O \cdot CO-$	C-463.3
Benzylthio	$C_6H_5 \cdot CH_2 \cdot S-$	C-514.1
Bicyclo[2.2.1]hept-5-en-2-yl	C_7H_9-	A-31.4
Bi(cyclohexan)yl	$C_6H_{11} \cdot C_6H_{10}-$	A-52.1, C-71.2
Bi(cyclohexyl)yl	$C_6H_{11} \cdot C_6H_{10}-$	A-52.1, C-71.2
Binaphthalenyl	$C_{10}H_7 \cdot C_{10}H_6-$	A-52.1, C-71.2
Binaphthyl	$C_{10}H_7 \cdot C_{10}H_6-$	A-52.4, C-71.2
Biphenylenyl	$C_{12}H_7-$	A-21.1, A-24.2
Biphenyl	$C_6H_5 \cdot C_6H_4-$	A-52.4, C-71.2
Bornenyl	$C_{10}H_{15}-$	A-72.1, A-75.2
Bornyl (<i>replacing camphyl and bornyl</i>)	$C_{10}H_{17}-$	A-72.1, A-75.2
<i>bornyl</i> , see Bornyl		
Bromo	Br—	C-10.1, C-102
Bromoformyl	Br · CO—	C-481.2
Bromonio	+HBr—	C-82.1
Butadienyl (1,3- <i>shown</i>)	$CH_2 : CH : CH : CH-$	A-3.5
<i>butanedioyl</i> , see Succinyl		
Butanediylidene	$=CH \cdot CH_2 \cdot CH_2 \cdot CH=$	A-4.4
Butanediylidyne	$\equiv C \cdot CH_2 \cdot CH_2 \cdot C \equiv$	A-4.4
1,2,3-Butanetricarbonyl	$CH_3 \cdot CH-CH-CH \cdot CO-$ $\begin{array}{cc} & \\ -CO & CO- \end{array}$	C-403.2
<i>butanoyl</i> , see Butyryl		
1-Butanylidene-4-ylidyne	$\equiv C \cdot CH_2 \cdot CH_2 \cdot CH=$	A-4.4
<i>cis-butenedioyl</i> , see Maleoyl		
<i>trans-butenedioyl</i> , see Fumaroyl		
<i>butenoyl</i> , see Crotonoyl and Isocrotonoyl		
1-Butenyl	$CH_3 \cdot CH_2 \cdot CH : CH-$	A-3.5
2-Butenyl (<i>replacing crotyl</i>)	$CH_3 \cdot CH : CH \cdot CH_2-$	A-3.5
2-Butenylene	$-CH_2 \cdot CH : CH \cdot CH_2-$	A-4.3
Butenylidene (2- <i>shown</i>)	$CH_3 \cdot CH : CH \cdot CH=$	A-4.1
Butenylidyne (2- <i>shown</i>)	$CH_3 \cdot CH : CH \cdot C \equiv$	A-4.1
Butoxy	$CH_3 \cdot [CH_2]_2 \cdot CH_2 \cdot O-$	C-205.1
<i>sec</i> -Butoxy (<i>unsubstituted only</i>)	$C_2H_5 \cdot CH(CH_3) \cdot O-$	C-205.1
<i>tert</i> -Butoxy (<i>unsubstituted only</i>)	$(CH_3)_3C \cdot O-$	C-205.1
Butyl	$CH_3 \cdot [CH_2]_2 \cdot CH_2-$	A-1.2
<i>sec</i> -Butyl (<i>unsubstituted only</i>)	$C_2H_5 \cdot CH(CH_3)-$	A-2.25
<i>tert</i> -Butyl (<i>unsubstituted only</i>)	$(CH_3)_3C-$	A-2.25
Butylidene	$CH_3 \cdot CH_2 \cdot CH_2 \cdot CH=$	A-4.1
<i>sec</i> -Butylidene (<i>unsubstituted only</i>)	$C_2H_5 \cdot C(CH_3)=$	A-4.1
Butylidyne	$CH_3 \cdot [CH_2]_2 \cdot C \equiv$	A-4.1
Butyryl (<i>preferred to butanoyl</i>)	$CH_3 \cdot CH_2 \cdot CH_2 \cdot CO-$	C-404.1
Camphoroyl (<i>preferred to 1,2,2-trimethyl-1,3-cyclopentanedicarbonyl</i>)	$C_{10}H_{14}O_2-$	C-404.1
<i>camphyl</i> , see Bornyl		
Carbamoyl	$NH_2 \cdot CO-$	C-431.2
<i>carbazido</i> , see Carbonohydrazido		
Carbazolyl	$NC_{12}H_8-$	B-2.11, B-5.11
Carbazono	$HN : N \cdot CO \cdot NH \cdot NH-$	C-981.1, C-981.2
Carbazoyl	$NH_2 \cdot NH \cdot CO-$	C-984.1
Carbodiazono	$HN = N \cdot CO \cdot N = N-$	C-981.1, C-981.2
Carbolinyl (α -, β -, γ -)	$N_3C_{11}H_7-$	B-2.11, B-5.11
Carbonimidoyl	$-C(:NH)-$	C-451.4

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Carbonohydrazido (<i>preferred to carbohydrazido or carbazido</i>)	$\text{H}_2\text{N} \cdot \text{NH} \cdot \text{CO} \cdot \text{NH} \cdot \text{NH}-$	C-981.1, C-981.2
Carbonyl	$-\text{CO}-, \text{OC}-$	C-72.1, C-108.2, C-403.2
Carbonyldioxy	$-\text{O} \cdot \text{CO} \cdot \text{O}-$	C-205.2
Carboxy	$\text{HO}_2\text{C}-$	C-10.3, C-401.3
Carboxylato	$-\text{OOC}-$	C-86.1
Carenyl	$\text{C}_{10}\text{H}_{15}-$	A-72.1, A-75.2
Caryl	$\text{C}_{10}\text{H}_{17}-$	A-72.1, A-75.2
Chloro	$\text{Cl}-$	C-10.1, C-102
<i>chlorocarbonyl, see Chloroformyl</i>		
Chloroformyl (<i>replacing chlorocarbonyl</i>)	$\text{Cl} \cdot \text{OC}-$	C-10.3, C-481.2
Chloronio	$+\text{HCl}-$	C-82.1
Chlorosyl	$\text{OCl}-$	C-10.1, C-106.2
Chlorothio	$\text{ClS}-$	C-621.2
Chloryl	$\text{O}_2\text{Cl}-$	C-10.1, C-106.2
Cholanthrenyl	$\text{C}_{20}\text{H}_{13}-$	A-23.1, A-24.2
Chromanyl	OC_9H_9-	B-2.12, B-5.11
Chromenyl	OC_9H_7-	B-2.11, B-5.11
Chrysenyl	$\text{C}_{18}\text{H}_{11}-$	A-21.1, A-24.2
Cinnamoyl (<i>preferred to 3-phenylpropenoyl</i>)	$\text{C}_6\text{H}_5 \cdot \text{CH} : \text{CH} \cdot \text{CO}-$	C-404.1
Cinnamyl	$\text{C}_6\text{H}_5 \cdot \text{CH} : \text{CH} \cdot \text{CH}_2-$	A-13.3
Cinnamylidene	$\text{C}_6\text{H}_5 \cdot \text{CH} : \text{CH} \cdot \text{CH} =$	A-13.4
Cinnolinyl	$\text{N}_2\text{C}_8\text{H}_6-$	B-2.11, B-5.11
	$\text{HC} \cdot \text{CO}-$	
Citraconoyl (<i>unsubstituted only</i>)	$\text{CH}_3 \cdot \overset{\parallel}{\text{C}} \cdot \text{CO}-$	C-404.1
Coronenyl	$\text{C}_{24}\text{H}_{11}-$	A-21.1, A-24.2
Crotonoyl (<i>preferred to trans-2-butenoyl</i>)	$\text{CH}_3 \cdot \text{CH} : \text{CH} \cdot \text{CO}-$ (<i>trans</i>)	C-404.1
<i>crotyl, see 2-Butenyl</i>		
Cumenyl (<i>o-, m-, or p-</i>)	$(\text{CH}_3)_2\text{CH} \cdot \text{C}_6\text{H}_4-$	A-13.1
Cyanato	$\text{NCO}-$	C-833.1
Cyano	$\text{N} \equiv \text{C}-$	C-10.3, C-832.5
Cyclobutyl	C_4H_7-	A-11.2
Cycloheptyl	$\text{C}_7\text{H}_{13}-$	A-11.2
Cyclohexadienyl (2,4- <i>shown</i>)	$\text{CH}_2 \cdot \text{CH} : \text{CH} \cdot \text{CH} : \text{CH} \cdot \text{CH}-$ 	A-11.4
Cyclohexadienylene	$-\text{C}_6\text{H}_6-$	A-11.6
Cyclohexadienylidene (2,4- <i>shown</i>)	$\text{CH} : \text{CH} \cdot \text{CH} : \text{CH} \cdot \text{CH}_2 \cdot \text{C} =$ 	A-11.5
Cyclohexanecarbohydrazonoyl	$\text{C}_6\text{H}_{11} \cdot \text{C}(:\text{N} \cdot \text{NH}_2)-$	C-451.2
Cyclohexanecarbohydroximoyl	$\text{C}_6\text{H}_{11} \cdot \text{C}(:\text{N} \cdot \text{OH})-$	C-451.2
Cyclohexanecarbonyl	$\text{C}_6\text{H}_{11} \cdot \text{CO}-$	C-403.2
Cyclohexanecarbothioyl	$\text{C}_6\text{H}_{11} \cdot \text{CS}-$	C-543.3
Cyclohexanecarboxamido	$\text{C}_6\text{H}_{11} \cdot \text{CO} \cdot \text{NH}-$	C-824.3
Cyclohexanecarboximidoyl	$\text{C}_6\text{H}_{11} \cdot \text{C}(:\text{NH})-$	C-451.2
Cyclohexenyl	C_6H_9-	A-11.4
Cyclohexenylene	$-\text{C}_6\text{H}_8-$	A-11.6
2-Cyclohexenylidene	$\text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH} : \text{CH} \cdot \text{C} =$ 	A-11.5
Cyclohexyl	$\text{C}_6\text{H}_{11}-$	A-11.2
Cyclohexylcarbonyl	$\text{C}_6\text{H}_{11} \cdot \text{CO}-$	C-403.2

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Cyclohexylene	$-\text{C}_6\text{H}_{10}-$	A-11.6
Cyclohexylidene	$\text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{C} =$ 	A-11.5
Cyclohexylthiocarbonyl	$\text{C}_6\text{H}_{11} \cdot \text{CS}-$	C-543.3
Cyclopentadienyl	C_5H_5-	A-11.4
Cyclopentadienylidene	$\text{CH} : \text{CH} \cdot \text{CH} : \text{CH} \cdot \text{C} =$ 	A-11.5
Cyclopentanespirocyclobutyl	$\text{C}_8\text{H}_{13}-$	A-11.2, A-42.1
Cyclopenta[<i>a</i>]phenanthryl	$\text{C}_{17}\text{H}_{11}$	{ A-21, A-23.1, A-24.2
1,2-Cyclopentenophenanthryl		{ A-21, A-23.5, A-24.2
Cyclopentenyl	C_5H_7-	A-11.4
Cyclopentenylidene (2- <i>shown</i>)	$\text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH} : \text{CH} \cdot \text{C} =$ 	A-11.5
Cyclopentyl	C_5H_9-	A-11.2
Cyclopentylene	$-\text{C}_5\text{H}_8-$	A-11.6
Cyclopentylidene	$\text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{C} =$ 	A-11.5
Cyclopropyl	C_3H_5-	A-11.2
Cystathionyl	$\text{S} \begin{cases} \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}- \\ \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}- \end{cases}$	C-421.1
Cysteinyl	$\text{HS} \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.2
Cystyl	$-\text{CO} \cdot \text{CH}(\text{NH}_2) \cdot \text{CH}_2 \cdot \text{S} \cdot \text{S} \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1
Decanedioyl	$-\text{CO} \cdot [\text{CH}_2]_8 \cdot \text{CO}-$	C-403.1
Decanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_8 \cdot \text{CO}-$	C-403.1
Decyl	$\text{CH}_3 \cdot [\text{CH}_2]_8 \cdot \text{CH}_2-$	A-1.2
Diacetoxiodo	$(\text{CH}_3 \cdot \text{CO} \cdot \text{O})_2\text{I}-$	C-10.1, C-106.3
Diacetylamino	$(\text{CH}_3 \cdot \text{CO})_2\text{N}-$	C-826.3
Diaminomethyleneamino	$(\text{NH}_2)_2\text{C} : \text{N}-$	C-961.2
Diazaanthryl	$\text{N}_2\text{C}_{12}\text{H}_7-$	B-4.1, B-5.21
Diazo	$=\text{N}_2$	C-10.1, C-931.4
Diazoamino	$-\text{N} : \text{N} \cdot \text{NH}-$	C-942.2
Dibenzoylamino	$(\text{C}_6\text{H}_5 \cdot \text{CO})_2\text{N}-$	C-826.3
Dichloriodo	$\text{Cl}_2\text{I}-$	C-10.1, C-106.3
Diethylamino	$(\text{C}_2\text{H}_5)_2\text{N}-$	C-811.4
3,4-dihydroxybenzoyl, <i>see</i> Protocatechuoyl		
2,3-dihydroxybutanedioyl, <i>see</i> Tartaroyl		
Dihydroxyiodo	$(\text{HO})_2\text{I}-$	C-10.1, C-106.3
2,3-dihydroxypropanoyl, <i>see</i> Glyceroyl		
3,4-dimethoxybenzoyl, <i>see</i> Veratroyl		
3,4-Dimethoxyphenethyl	$3,4-(\text{CH}_3\text{O})_2\text{C}_6\text{H}_3 \cdot \text{CH}_2 \cdot \text{CH}-$	A-13.3
3,4-Dimethoxyphenylacetyl	$3,4-(\text{CH}_3\text{O})_2\text{C}_6\text{H}_3 \cdot \text{CH}_2 \cdot \text{CO}-$	C-401.4
Dimethylamino	$(\text{CH}_3)_2\text{N}-$	C-811.4
Dimethylbenzoyl	$(\text{CH}_3)_2\text{C}_6\text{H}_3 \cdot \text{CO}-$	C-404.1
Dioxacyclohexyl	$\text{O}_2\text{C}_4\text{H}_7-$	B-4.1, B-5.21
Dioxy	$-\text{O} \cdot \text{O}-$	C-218.2
Diphenylamino	$(\text{C}_6\text{H}_5)_2\text{N}-$	C-811.4
Diphenylmethyl (<i>alternative to Benzhydryl</i>)	$(\text{C}_6\text{H}_5)_2\text{CH}-$	A-13.3
Diphenylmethylen (<i>alternative to Benzhydrylidene</i>)	$(\text{C}_6\text{H}_5)_2\text{C} =$	A-13.4
Dithianaphthyl	$\text{S}_2\text{C}_6\text{H}_7-$	B-4.1, B-5.21
Dithio	$-\text{S}_2-$	C-515.1

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.	
Dithiocarboxy	HSSC—	C-541.1	Fury.
Dithiosulfo	HOS ₂ —	C-641.3	3-Fu
Docosyl	CH ₃ ·[CH ₂] ₂₀ ·CH ₂ —	A-1.2	Fu
Dodecanoyl	CH ₃ ·[CH ₂] ₁₀ ·CO—	C-403.1	
Dodecyl	CH ₃ ·[CH ₂] ₁₀ ·CH ₂ —	A-1.2	
Dotriacontyl	CH ₃ ·[CH ₂] ₃₀ ·CH ₂ —	A-1.2	Gallc
			3,4
Elaidoyl (<i>preferred to trans-9-octadecenoyl</i>)	CH ₃ ·[CH ₂] ₇ ·CH:CH·[CH ₂] ₇ ·CO—	C-404.1	Gera
Epidioxy (<i>as a bridge</i>)	—O·O—	C-218.2	Gluta
Epidiseleno (<i>as a bridge</i>)	—Se ₂ —	C-701.1	Gluta
Epidithio (<i>as a bridge</i>)	—S ₂ —	C-515.4	α-Glu
Epimino (<i>as a bridge</i>)	—NH—	C-815.2	γ-Glu
Episeleno (<i>as a bridge</i>)	—Se—	C-701.1	Gluta
Epithio (<i>as a bridge</i>)	—S—	C-514.4	Glyco
Epoxy (<i>as bridge</i>)	—O—	C-212.2	2,3
ethanedioyl, <i>see</i> Oxalyl			Glyco
Ethanediyldiene	=CH·CH=	A-4.4	hya
Ethanesulfonamido	C ₂ H ₅ ·SO ₂ ·NH—	C-641.7, C-641.8, C-823.1	Glyc
ethanoyl, <i>see</i> Acetyl			Glyc
ethenyl, <i>see</i> Vinyl			Glyo
Ethoxalyl	C ₂ H ₅ OOC·CO—	C-405.2	Guar
Ethoxy	C ₂ H ₅ ·O—	C-205.1	Guang
Ethoxycarbonyl	C ₂ H ₅ ·O·OC—	C-463.3	
Ethyl	CH ₃ ·CH ₂ —	A-1.2	Hecty
Ethylamino	C ₂ H ₅ ·NH—	C-811.4	Henii
Ethylene	—CH ₂ ·CH ₂ —	A-4.2	Hent
Ethylenedioxy	—O·CH ₂ ·CH ₂ ·O—	C-72.2, C-205.2, C-212.3	Hept
Ethylidene	CH ₃ ·CH=	A-4.1	Hept
Ethylidyne	CH ₃ ·C≡	A-4.1	Hept
Ethylsulfonylamino	C ₂ H ₅ ·SO ₂ ·NH—	C-641.7, C-641.8, C-823.1	Hept
Ethylthio	CH ₃ ·CH ₂ ·S—	C-514.1	Hept
Ethynyl	HC≡C—	A-3.5	Hept
Ethynylene	—C≡C—	A-4.3	Hept
			Hept
Fluoranthenyl	C ₁₆ H ₉ —	A-21.1, A-24.2	Hept
Fluorenyl	C ₁₃ H ₉ —	A-21.1, A-24.2	Hept
Fluorenylidene	C ₁₃ H ₈ =	A-21.1, A-24.3	Hexa
Fluoro	F—	C-10.1, C-102.1	Hexa
Fluoroformyl	F·CO—	C-481.2	Hexa
Formamido	OCH·NH—	C-823.1	Hexa
Formimidoyl	CH(:NH)—	C-451.2	Hexa
Formyl (<i>preferred to methanoyl</i>)	OHC—	C-10.3, C-304.2, C-404.1	Hexa
Formylamino	H·CO·NH—	C-823.1	Hexa
Formylimino	H·CO·N=	C-815.1	hexanu
Formyloxy	H·CO·O—	C-463.3	Hexa
Fumaroyl (<i>preferred to trans-butenedioyl</i>)	—CO·CH:CH·CO— (<i>trans</i>)	C-404.1	Hexa
furancarbonyl, <i>see</i> Furoyl			Hexa
Furazanyl	N ₂ OC ₂ H—	B-2.11, B-5.11	Hexa
Furfuryl (2- only) (<i>preferred to 2-furylmethyl</i>)	OC ₄ H ₃ ·CH ₂ —	B-5.11	Hexa
Furfurylidene (2- only)	O·CH:CH·CH:C·CH=	B-5.11	Hexy
	[]		Hexy
Furoyl (3- shown) (<i>preferred to furancarbonyl</i>)	CH:CH·O·CH:C·CO—	C-404.1	Hexy
	[]		Hippi
			Histic

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Furyl	$\text{OC}_4\text{H}_3\text{—}$	B-2.11, B-5.11
3-Furylmethyl (<i>contrast</i> Furfuryl)	$\text{CH:CH}\cdot\text{O}\cdot\text{CH:C}\cdot\text{CH}_2\text{—}$ 	C-12.7
Galloyl (<i>preferred to</i> 3,4,5-trihydroxybenzoyl)	$3,4,5\text{-(HO)}_3\text{C}_6\text{H}_2\cdot\text{CO—}$	C-411.1
Geranyl	$\text{C}_{10}\text{H}_{17}\text{—}$	A-75.1
Glutaminy	$\text{NH}_2\cdot\text{CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CH(NH}_2\text{)}\cdot\text{CO—}$	C-421.3
Glutamoyl	$\text{—CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CH(NH}_2\text{)}\cdot\text{CO—}$	C-421.3
α -Glutamyl	$\text{HOOC}\cdot[\text{CH}_2]_2\cdot\text{CH(NH}_2\text{)}\cdot\text{CO—}$	C-421.3
γ -Glutamyl	$\text{HOOC}\cdot\text{CH(NH}_2\text{)}\cdot[\text{CH}_2]_2\cdot\text{CO—}$	C-421.3
Glutaryl (<i>preferred to pentanedioyl</i>)	$\text{—CO}\cdot[\text{CH}_2]_3\cdot\text{CO—}$	C-404.1
Glyceroyl (<i>preferred to</i> 2,3-dihydroxypropanoyl)	$\text{HO}\cdot\text{CH}_2\cdot\text{CH(OH)}\cdot\text{CO—}$	C-411.1
Glycolyl (<i>preferred to</i> hydroxyethanoyl)	$\text{HO}\cdot\text{CH}_2\cdot\text{CO—}$	C-411.1
Glycyl	$\text{NH}_2\cdot\text{CH}_2\cdot\text{CO—}$	C-421.1
Glycylamino	$\text{NH}_2\cdot\text{CH}_2\cdot\text{CO}\cdot\text{NH—}$	C-823.2
Glyoxyloyl	$\text{OHC}\cdot\text{CO—}$	C-416.3
Guanidino	$\text{NH}_2\cdot\text{C}(\text{:NH})\cdot\text{NH—}$	C-961.2
<i>Guanyl, see Amidino</i>		
Hectyl	$\text{CH}_3\cdot[\text{CH}_2]_{98}\cdot\text{CH}_2\text{—}$	A-1.2
Henicosyl	$\text{CH}_3\cdot[\text{CH}_2]_{19}\cdot\text{CH}_2\text{—}$	A-1.2
Hentriacontyl	$\text{CH}_3\cdot[\text{CH}_2]_{20}\cdot\text{CH}_2\text{—}$	A-1.2
Heptacenyl	$\text{C}_{30}\text{H}_{17}\text{—}$	A-21.1, A-24.2
Heptacontyl	$\text{CH}_3\cdot[\text{CH}_2]_{68}\cdot\text{CH}_2\text{—}$	A-1.2
Heptacosyl	$\text{CH}_3\cdot[\text{CH}_2]_{26}\cdot\text{CH}_2\text{—}$	A-1.2
Heptadecanoyl	$\text{CH}_3\cdot[\text{CH}_2]_{16}\cdot\text{CO—}$	C-403.1
Heptadecyl	$\text{CH}_3\cdot[\text{CH}_2]_{15}\cdot\text{CH}_2\text{—}$	A-1.2
Heptalenyl	$\text{C}_{12}\text{H}_9\text{—}$	A-21.1, A-24.2
Heptanamido	$\text{CH}_3\cdot[\text{CH}_2]_5\cdot\text{CO}\cdot\text{NH—}$	C-823.1
Heptanedioyl	$\text{—CO}\cdot[\text{CH}_2]_5\cdot\text{CO—}$	C-403.1
Heptanoyl	$\text{CH}_3\cdot[\text{CH}_2]_5\cdot\text{CO—}$	C-403.1
Heptaphenyl (from heptaphene)	$\text{C}_{30}\text{H}_{17}\text{—}$	A-21.1, A-24.2
Heptyl	$\text{CH}_3\cdot[\text{CH}_2]_5\cdot\text{CH}_2\text{—}$	A-1.2
Hexacenyl	$\text{C}_{26}\text{H}_{16}\text{—}$	A-21.2, A-24.2
Hexacontyl	$\text{CH}_3\cdot[\text{CH}_2]_{58}\cdot\text{CH}_2\text{—}$	A-1.2
Hexacosyl	$\text{CH}_3\cdot[\text{CH}_2]_{24}\cdot\text{CH}_2\text{—}$	A-1.2
Hexadecanoyl	$\text{CH}_3\cdot[\text{CH}_2]_{14}\cdot\text{CO—}$	C-403.1
Hexadecyl	$\text{CH}_3\cdot[\text{CH}_2]_{14}\cdot\text{CH}_2\text{—}$	A-1.2
Hexamethylene	$\text{—CH}_2\cdot[\text{CH}_2]_4\cdot\text{CH}_2\text{—}$	A-4.2
Hexanamido	$\text{C}_5\text{H}_{11}\cdot\text{CO}\cdot\text{NH—}$	C-823.1
<i>hexanedioyl, see Adipoyl</i>		
Hexanimidoyl	$\text{C}_5\text{H}_{11}\cdot\text{C}(\text{:NH})\text{—}$	C-451.2
Hexanohydrazonoyl	$\text{C}_5\text{H}_{11}\cdot\text{C}(\text{:N}\cdot\text{NH}_2)\text{—}$	C-451.2
Hexanohydroximoyl	$\text{C}_5\text{H}_{11}\cdot\text{C}(\text{:N}\cdot\text{OH})\text{—}$	C-451.2
Hexanoyl	$\text{CH}_3\cdot[\text{CH}_2]_4\cdot\text{CO—}$	C-403.1
Hexanoylamino	$\text{C}_5\text{H}_{11}\cdot\text{CO}\cdot\text{NH—}$	C-823.1
Hexapheneyl (from hexaphene)	$\text{C}_{20}\text{H}_{16}\text{—}$	A-21.1, A-24.2
Hexyl	$\text{CH}_3\cdot[\text{CH}_2]_4\cdot\text{CH}_2\text{—}$	A-1.2
Hexylidene	$\text{CH}_3\cdot[\text{CH}_2]_4\cdot\text{CH=}$	A-4.1
Hexylidyne	$\text{CH}_3\cdot[\text{CH}_2]_4\cdot\text{C}\equiv$	A-4.1
Hexyloxy	$\text{CH}_3\cdot[\text{CH}_2]_5\cdot\text{O—}$	C-205.1
Hippuroyl	$\text{C}_8\text{H}_5\cdot\text{CO}\cdot\text{NH}\cdot\text{CH}_2\cdot\text{CO—}$	C-421.1, C-421.4
Histidyl	$\text{N}_2\text{C}_3\text{H}_3\cdot\text{CH}_2\cdot\text{CH(NH}_2\text{)}\cdot\text{CO—}$	C-421.1

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.	
Homocysteinyl	$\text{HS} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.2	Iso
Homoseryl	$\text{HO} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1	p
Hydantoyl	$\text{NH}_2 \cdot \text{CO} \cdot \text{NH} \cdot \text{CH}_2 \cdot \text{CO}-$	C-971.2	Iso
Hydratropoyl (<i>preferred to 2-phenylpropanoyl</i>)	$\text{C}_6\text{H}_5 \cdot \text{CH}(\text{CH}_3) \cdot \text{CO}-$	C-404.1	
Hydrazi	$-\text{NH} \cdot \text{NH}-$ (to a single atom)	C-921.4	Iso
Hydrazino	$\text{NH}_2 \cdot \text{NH}-$	C-921.1	Iso
Hydrazo	$-\text{NH} \cdot \text{NH}-$ (to different atoms)	C-921.2	c
Hydrazono	$\text{NH}_2 \cdot \text{N}=\text{}$	C-922.1	Iso
Hydroperoxy	$\text{HO} \cdot \text{O}-$	C-218.1	Iso
Hydroseleno	$\text{HSe}-$	C-701.1	Iso
Hydroxy	$\text{HO}-$	C-10.3, C-201.2	Iso
Hydroxyamino	$\text{HO} \cdot \text{NH}-$	C-841.1	Iso
<i>m</i> -Hydroxybenzoyl	<i>m</i> - $\text{HO} \cdot \text{C}_6\text{H}_4 \cdot \text{CO}-$	C-411.1	Iso
<i>o</i> -hydroxybenzoyl, <i>see</i> Salicyloyl			Iso
<i>p</i> -Hydroxybenzoyl	<i>p</i> - $\text{HO} \cdot \text{C}_6\text{H}_4 \cdot \text{CO}-$	C-411.1	Iso
2-hydroxybenzyl, <i>see</i> Salicyl			Iso
2-hydroxybenzylidene, <i>see</i> Salicylidene			c
hydroxybutanedioyl, <i>see</i> Maloyl			Iso
2-hydroxy-2,2-diphenylethanoyl, <i>see</i> Benziloyl			Iso
hydroxyethanoyl, <i>see</i> Glycoloyl			Iso
Hydroxyimino	$\text{HO} \cdot \text{N}=\text{}$	C-842.1	Iso
4-hydroxy-3-methoxybenzoyl, <i>see</i> Vanilloyl			Iso
3-hydroxy-2-phenylpropanoyl, <i>see</i> Tropoyl			z
hydroxypropanedioyl, <i>see</i> Tartronoyl			Iso
2-hydroxypropanoyl, <i>see</i> Lactoyl			p-I
Icosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{18} \cdot \text{CH}_2-$	A-1.2	Iso
Imidazolidinyl	$\text{N}_2\text{C}_3\text{H}_7-$	B-2.12, B-5.11	Iso
Imidazoliny	$\text{N}_2\text{C}_3\text{H}_5-$	B-2.12, B-5.11	Isc
Imidazolyl	$\text{N}_2\text{C}_3\text{H}_3-$	B-2.11, B-5.11	Isc
Imino	$-\text{HN}-$, $\text{HN}<$	C-815.1, C-815.3	Isc
Iminomethylamino	$\text{HN}=\text{CH}-\text{NH}-$	C-951.4	
Indacenyl	C_{12}H_7-	A-21.1, A-24.2	Iso
Indanyl	C_9H_6-	A-23.1, A-24.2	Isc
Indazolyl	$\text{N}_2\text{C}_7\text{H}_5-$	B-2.11, B-5.11	Isc
Indenyl	C_9H_7-	A-21.1, A-24.2	Isc
Indolinyl	NC_8H_8-	B-2.12, B-5.11	Isc
Indolinylidene (3- shown)	$\text{CH}_2 \cdot \text{NH} \cdot \text{C}_6\text{H}_4 \cdot \text{C}=\text{}$ $\quad \quad \quad $	B-5.12	Isc
Indoliziny	NC_8H_6-	B-2.11, B-5.11	La
Indolyl	NC_8H_6-	B-2.11, B-5.11	
Iodo	$\text{I}-$	C-10.1, C-102.1	La
Iodoformyl	$\text{I} \cdot \text{CO}-$	C-481.2	La
Iodonio	$+\text{HI}-$	C-82.1	Le
iodoso, <i>see</i> Iodosyl			Li
Iodosyl, <i>replacing iodoso</i>	$\text{OI}-$	C-10.1, C-106.1	Ly
iodoxy, <i>see</i> Iodyl			
Iodyl, <i>replacing iodoxy</i>	$\text{O}_2\text{I}-$	C-10.1, C-106.1	M:
Isobenzofuranyl	OC_8H_5-	B-2.11, B-5.11	
Isobutoxy (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH} \cdot \text{CH}_2 \cdot \text{O}-$	C-205.1	M:
Isobutyl (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH} \cdot \text{CH}_2-$	A-2.25	M:
Isobutylidene (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH} \cdot \text{CH}=\text{}$	A-4.1	
Isobutylidyne (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH} \cdot \text{C}\equiv$	A-4.1	M:

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Isobutyryl (<i>preferred to 2-methyl-propanoyl</i>) (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CO}-$	C-404.1
Isocarbonohydrazido	$\text{H}_2\text{N}\cdot\text{N}:\text{C}(\text{OH})\cdot\text{NH}\cdot\text{NH}-$ (and tautomers)	C-983.1
Isochromanyl	OC_7H_9	B-2.12, B-5.11
Isocoumarinyl	$\text{O}_2\text{C}_7\text{H}_5-$	B-5.11, C-473.1
Isocrotonoyl (<i>preferred to cis-2-butenoyl</i>)	$\text{CH}_3\cdot\text{CH}:\text{CH}\cdot\text{CO}-$ (<i>cis</i>)	C-404.1
Isocyanato	$\text{OCN}-$	C-833.1
Isocyano	$\text{CN}-$	C-833.1
Isohexyl (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot[\text{CH}_2]_2\cdot\text{CH}_2-$	A-2.25
Isohexylidene (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot[\text{CH}_2]_2\cdot\text{CH}=\text{}$	A-4.1
Isohexylidyne (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot[\text{CH}_2]_2\cdot\text{C}\equiv\text{}$	A-4.1
Isoindolinyl	NC_8H_8-	B-2.12, B-5.11
Isoindolyl	NC_8H_6-	B-2.11, B-5.11
Isoleucyl	$\text{C}_2\text{H}_5\cdot\text{CH}(\text{CH}_3)\cdot\text{CH}(\text{NH}_2)\cdot\text{CO}-$	C-421.1
Isonicotinoyl (<i>preferred to 4-pyridinecarbonyl</i>)	$\text{NC}_5\text{H}_4\cdot\text{CO}-$ (4-)	C-404.1
Isoxazolyl	ONC_3H_2-	B-2.11, B-5.11
Isopentyl (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{CH}_2-$	A-2.25
Isopentylidene (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{CH}=\text{}$	A-4.1
Isopentylidyne (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{C}\equiv\text{}$	A-4.1
Isopentyloxy (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{O}-$	C-205.1
Isophthaloyl (<i>preferred to 1,3-benzenedicarbonyl</i>)	$-\text{CO}\cdot\text{C}_6\text{H}_4\cdot\text{CO}-$ (<i>m</i> -)	C-404.1
Isopropenyl (<i>replacing 1-methyl-vinyl</i>) (<i>unsubstituted only</i>)	$\text{CH}_2:\text{C}(\text{CH}_3)-$	A-3.5
Isopropoxy (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{O}-$	C-205.1
Isopropyl (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}-$	A-2.25
<i>p</i> -Isopropylbenzoyl	$p-(\text{CH}_3)_2\text{CH}\cdot\text{C}_6\text{H}_4\cdot\text{CO}-$	C-404.1
Isopropylbenzyl	$(\text{CH}_3)_2\text{CH}\cdot\text{C}_6\text{H}_4\cdot\text{CH}_2-$	A-13.3
Isopropylidene	$(\text{CH}_3)_2\text{C}=\text{}$	A-4.1
Isoquinolyl	NC_9H_6-	B-2.11, B-5.11
Isoselenocyanato	$\text{SeCN}-$	C-833.1
Isosemicarbazido	$\text{H}_2\text{N}\cdot\text{NH}\cdot\text{C}(\text{OH})\cdot\text{N}-$ (and tautomers)	C-983.1
Isothiazolyl	SNC_3H_2-	B-2.11, B-5.11
Isothiocyanato	$\text{SCN}-$	C-833.1
Isothioureido	$\text{HN}:\text{C}(\text{SH})\cdot\text{NH}-$, $\text{H}_2\text{N}\cdot\text{C}(\text{SH})\cdot\text{N}-$	C-972.2, C-974.1
Isoureido	$\text{HN}:\text{C}(\text{OH})\cdot\text{NH}-$, $\text{H}_2\text{N}\cdot\text{C}(\text{OH})\cdot\text{N}-$	C-972.2
Isovaleryl (<i>preferred to 3-methyl-butanoyl</i>) (<i>unsubstituted only</i>)	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{CO}-$	C-404.1
Isoviolanthrenyl	$\text{C}_{34}\text{H}_{19}-$	A-23.1, A-24.2
Lactoyl (<i>preferred to 2-hydroxypropanoyl</i>)	$\text{CH}_3\cdot\text{CH}(\text{OH})\cdot\text{CO}-$	C-411.1
Lanthionyl	$-\text{CO}\cdot\text{CH}(\text{NH}_2)\cdot\text{CH}_2\cdot\text{S}\cdot\text{CH}_2\cdot\text{CH}(\text{NH}_2)\cdot\text{CO}-$	C-421.1
Lauroyl (<i>unsubstituted only</i>)	$\text{CH}_3\cdot[\text{CH}_2]_{10}\cdot\text{CO}-$	C-404.1
Leucyl	$(\text{CH}_3)_2\text{CH}\cdot\text{CH}_2\cdot\text{CH}(\text{NH}_2)\cdot\text{CO}-$	C-421.1
Linalyl	$\text{C}_{10}\text{H}_{17}-$	A-75.1
Lysyl	$\text{NH}_2\cdot[\text{CH}_2]_4\cdot\text{CH}(\text{NH}_2)\cdot\text{CO}-$	C-421.1
Maleoyl (<i>preferred to cis-butenedioyl</i>)	$-\text{CO}\cdot\text{CH}:\text{CH}\cdot\text{CO}-$	C-404.1
Malonyl (<i>preferred to propanedioyl</i>)	$-\text{CO}\cdot\text{CH}_2\cdot\text{CO}-$	C-404.1
Maloyl (<i>preferred to hydroxybutanedioyl</i>)	$-\text{CO}\cdot\text{CH}(\text{OH})\cdot\text{CH}_2\cdot\text{CO}-$	C-411.1
Menthenyl	$\text{C}_{10}\text{H}_{17}-$	A-73.1, A-75.2

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Menthyl	$C_{10}H_{19}-$	A-72.1, A-75.2
Mercapto	$HS-$	C-10.3, C-511.1
Mesaconoyl (<i>unsubstituted only</i>)	$-CO \cdot CH$ $\parallel$ $CH_3 \cdot C \cdot CO-$	C-404.1
Mesityl	$2,4,6-(CH_3)_3C_6H_2-$	A-13.1
Mesoxalo	$HOOC \cdot CO \cdot CO-$	C-416.3
Mesoxalyl	$-CO \cdot CO \cdot CO-$	C-416.3
Mesyl	$CH_3 \cdot SO_2-$	C-641.7
Methacryloyl (<i>preferred to 2-methylpropenoyl</i>)	$CH_2 : C(CH_3) \cdot CO-$	C-404.1
Methaneazo	$CH_3 \cdot N : N-$	C-911.2
Methaneazoxy	$CH_3 \cdot N_2O-$	C-913.1
Methanesulfinamido	$CH_3 \cdot SO \cdot NH-$	C-641.8
Methanesulfinyl	$CH_3 \cdot SO-$	C-631.1
Methanesulfonamido	$CH_3 \cdot SO_2 \cdot NH-$	C-641.8
<i>methanesulfonyl, see Mesyl</i>		
<i>methanoyl, see Formyl</i>		
Methionyl	$CH_3 \cdot S \cdot CH_2 \cdot CH_2 \cdot CH(NH_2) \cdot CO-$	C-421.1
Methoxalyl	$CH_3OOC \cdot CO-$	C-405.2
Methoxy	CH_3O-	C-205.1
<i>methoxybenzoyl, see Anisoyl</i>		
Methoxycarbonyl	$CH_3O \cdot OC-$	C-463.3
Methoxyimino	$CH_3 \cdot O \cdot N=$	C-842.2
Methoxyphenyl	$CH_3O \cdot C_6H_4-$	A-13.1
Methoxysulfinyl	$CH_3 \cdot O \cdot SO-$	C-641.6
Methoxysulfonyl	$CH_3 \cdot O \cdot SO_2-$	C-641.6
Methoxy(thiosulfonyl)	$CH_3 \cdot O \cdot S_2O-$	C-641.6
Methyl	CH_3-	A-1.2
<i>α-methylacryloyl, see Methacryloyl</i>		
Methylallyl	$CH_2 : C(CH_3) \cdot CH_2-$	A-3.5
Methylamino	$CH_3 \cdot NH-$	C-811.4
Methylazo	$CH_3 \cdot N : N-$	C-912.3
Methylazoxy	$CH_3 \cdot N_2O-$	C-913.1
<i>methylbenzenecarbonoyl, see Toluoyl</i>		
α -Methylbenzyl	$C_6H_5 \cdot CH(CH_3)-$	A-13.3
Methylbenzyl	$CH_3 \cdot C_6H_4 \cdot CH_2-$	A-13.3
<i>3-methylbutanoyl, see Isovaleryl</i>		
<i>cis</i> -Methylbutenedioyl	$HC \cdot CO-$ $\parallel$ $CH_3 \cdot C \cdot CO-$ $-CO \cdot CH$	C-404.1
<i>trans</i> -Methylbutenedioyl	$\parallel$ $CH_3 \cdot C \cdot CO-$	C-404.1
Methyldithio	$CH_3 \cdot S_2-$	C-515.1
Methylene	$-CH_2-$, $H_2C<$	A-4.1
Methylenedioxy	$-O \cdot CH_2 \cdot O-$	C-72.2, C-205.2, C-212.3
<i>3,4-methylenedioxybenzoyl, see Piperonyl</i>		
5-Methylhexyl	$(CH_3)_2CH \cdot CH_2 \cdot CH_2 \cdot CH_2 \cdot CH_2-$	A-2.25
Methylidyne	$HC \equiv$	A-4.1
1-Methylpentyl	$CH_3 \cdot CH_2 \cdot CH_2 \cdot CH_2 \cdot CH(CH_3)-$	A-2.25
2-Methylpentyl	$CH_3 \cdot CH_2 \cdot CH_2 \cdot CH(CH_3) \cdot CH_2-$	A-2.25
<i>2-methylpropenoyl, see Methacryloyl</i>		
Methylsulfinimidoyl	$CH_3 \cdot S(:NH)-$	C-642

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Methylsulfinohydrazonoyl	$\text{CH}_3 \cdot \text{S}(\text{:N} \cdot \text{NH}_2) -$	C-642.2
Methylsulfinohydroximoyl	$\text{CH}_3 \cdot \text{S}(\text{:N} \cdot \text{OH}) -$	C-642.2
Methylsulfinyl	$\text{CH}_3 \cdot \text{SO} -$	C-631.1
Methylsulfinylamino	$\text{CH}_3 \cdot \text{SO} \cdot \text{NH} -$	C-641.7, C-641.8, C-823.1
Methylsulfonimidoyl	$\text{CH}_3 \cdot \text{S}(\text{O})(\text{NH}) -$	C-642
Methylsulfonohydrazonoyl	$\text{CH}_3 \cdot \text{S}(\text{O})(\text{N} \cdot \text{NH}_2) -$	C-642
Methylsulfonohydroxamoyl	$\text{CH}_3 \cdot \text{S}(\text{O})(\text{N} \cdot \text{OH}) -$	C-642
<i>methylsulfonyl, see Mesyl</i>		
Methylthio	$\text{CH}_3\text{S} -$	C-514.1
(Methylthio)sulfonyl	$\text{CH}_3 \cdot \text{S} \cdot \text{SO}_2 -$	C-641.6
<i>1-methylvinyl, see Isopropenyl</i>		
Morpholino (4-position only)	$\text{CH}_2 \cdot \text{CH}_2 \cdot \text{O} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{N} -$ 	B-2.12, B-5.11
Morpholinyl (3- shown)	$\text{NH} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{O} \cdot \text{CH}_2 \cdot \text{CH} -$ 	B-2.12, B-5.11
Myristoyl (unsubstituted only)	$\text{CH}_3 \cdot [\text{CH}_2]_{12} \cdot \text{CO} -$	C-404.1
Naphthacenyl	$\text{C}_{18}\text{H}_{11} -$	A-21.1, A-24.2
Naphthaleneazo	$\text{C}_{10}\text{H}_7 \cdot \text{N} \cdot \text{N} -$	C-911.2
<i>naphthalenecarbonyl, see Naphthoyl</i>		
Naphthalenetetrayl	$> \text{C}_{10}\text{H}_4 <$	A-24.4
Naphtho[2,3-b]thienyl (replacing thiophanthrenyl)	$\text{SC}_{12}\text{H}_7 -$	B-2.11, B-5.11
Naphthoyl (preferred to <i>naphthalenecarbonyl</i>)	$\text{C}_{10}\text{H}_7 \cdot \text{CO} -$	C-404.1
Naphthoxyloxy	$\text{C}_{10}\text{H}_7 \cdot \text{CO} \cdot \text{O} -$	C-463.3
Naphthyl	$\text{C}_{10}\text{H}_7 -$	A-24.2
Naphthylazo	$\text{C}_{10}\text{H}_7 \cdot \text{N} \cdot \text{N} -$	C-912.3
Naphthylene	$-\text{C}_{10}\text{H}_6 -$	A-24.4
Naphthylenebisazo	$-\text{N} \cdot \text{N} \cdot \text{C}_{10}\text{H}_6 \cdot \text{N} \cdot \text{N} -$	C-912.5
Naphthylmethylene	$\text{C}_{10}\text{H}_7 \cdot \text{CH} =$	A-4.1
Naphthylmethylidyne	$\text{C}_{10}\text{H}_7 \cdot \text{C} \equiv$	A-4.1
Naphthyloxy	$\text{C}_{10}\text{H}_7 \cdot \text{O} -$	C-205.1
Naphthyridinyl	$\text{N}_2\text{C}_8\text{H}_5 -$	B-2.11, B-5.11
Neopentyl (unsubstituted only)	$(\text{CH}_3)_3\text{C} \cdot \text{CH}_2 -$	A-2.25
Neryl	$\text{C}_{10}\text{H}_{17} -$	A-75.1
Nicotinoyl (preferred to <i>3-pyridinecarbonyl</i>)	$\text{NC}_5\text{H}_4 \cdot \text{CO} - (3-)$	C-404.1
Nitrilo	$\text{N} \equiv$	C-72.1, C-815.1
Nitro	$\text{O}_2\text{N} -$	C-10.1, C-852.1
<i>aci</i> -Nitro	$\text{HO} \cdot (\text{O}:)\text{N} =$	C-10.1, C-852.2
Nitroso	$\text{ON} -$	C-10.1, C-851.1
Nonacontyl	$\text{CH}_3 \cdot [\text{CH}_2]_{88} \cdot \text{CH}_2 -$	A-1.2
Nonacosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{27} \cdot \text{CH}_2 -$	A-1.2
Nonadecyl	$\text{CH}_3 \cdot [\text{CH}_2]_{17} \cdot \text{CH}_2 -$	A-1.2
Nonanediol	$-\text{CO} \cdot [\text{CH}_2]_7 \cdot \text{CO} -$	C-403.1
Nonanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_7 \cdot \text{CO} -$	C-403.1
Nonyl	$\text{CH}_3 \cdot [\text{CH}_2]_7 \cdot \text{CH}_2 -$	A-1.2
Norbornyl (replacing <i>norcamphyl</i> and <i>norbornyl</i>)	$\text{C}_7\text{H}_{11} -$	A-75.2
<i>norbornyl, see Norbornyl</i>		
<i>norcamphyl, see Norbornyl</i>		
Norcaryl	$\text{C}_7\text{H}_{11} -$	A-75.2
Norleucyl	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO} -$	C-421.1
Norpinanyl	$\text{C}_7\text{H}_{11} -$	A-75.2
Norvalyl	$\text{CH}_3 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO} -$	C-421.1

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Octacontyl	$\text{CH}_3 \cdot [\text{CH}_2]_{78} \cdot \text{CH}-$	A-1.2
Octacosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{26} \cdot \text{CH}_2-$	A-1.2
Octadecanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_{16} \cdot \text{CO}-$	C-403.1
<i>cis</i> -9-octadecenoyl, <i>see</i> Oleoyl		
Octadecyl	$\text{CH}_3 \cdot [\text{CH}_2]_{16} \cdot \text{CH}_2-$	A-1.2
Octanedioyl	$-\text{CO} \cdot [\text{CH}_2]_6 \cdot \text{CO}-$	C-403.1
Octanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_6 \cdot \text{CO}-$	C-403.1
Octyl	$\text{CH}_3 \cdot [\text{CH}_2]_6 \cdot \text{CH}_2-$	A-1.2
Oleoyl (<i>preferred to cis</i> -9-octadecenoyl)	$\text{CH}_3 \cdot [\text{CH}_2]_7 \cdot \text{CH} : \text{CH} \cdot [\text{CH}_2]_7 \cdot \text{CO}-$	C-404.1
Ornithyl	$\text{NH}_2 \cdot [\text{CH}_2]_3 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1
Ovalenyl	$\text{C}_{32}\text{H}_{13}-$	A-21.1, A-24.2
Oxalaceto	$\text{HOOC} \cdot \text{CO} \cdot \text{CH}_2 \cdot \text{CO}-$	C-416.3
Oxalacetyl	$-\text{CO} \cdot \text{CH}_2 \cdot \text{CO} \cdot \text{CO}-$	C-416.3
Oxalo	$\text{HOOC} \cdot \text{CO}-$	C-405.2
Oxalyl (<i>preferred to ethanedioyl</i>)	$-\text{CO} \cdot \text{CO}-$	C-404.1, C-405.2
Oxamoyl	$\text{NH}_2 \cdot \text{CO} \cdot \text{CO}-$	C-431.2
Oxapyrenyl	$\text{OC}_{15}\text{H}_9-$	B-4.1, B-5.21
Oxaziny	ONC_4H_4-	B-1, B-5.11
Oxazolidinyl	ONC_3H_5-	B-1, B-5.11
Oxazolinyl	ONC_3H_4-	B-1, B-5.11
Oxazolyl	ONC_3H_2-	B-1, B-5.11
Oxido	$-\text{O}-$ (ion)	C-86.2
Oxo	$\text{O}=\text{}$	C-10.3, C-316
Oxonio	$^+\text{H}_2\text{O}-$	C-82.1, C-85, C-87.1
Oxy	$-\text{O}-$	C-72.2, C-212.1
Palmitoyl (<i>unsubstituted only</i>)	$\text{CH}_3 \cdot [\text{CH}_2]_{14} \cdot \text{CO}-$	C-404.1
Pentacenyl	$\text{C}_{22}\text{H}_{13}-$	A-21.1, A-24.2
Pentacontyl	$\text{CH}_3 \cdot [\text{CH}_2]_{48} \cdot \text{CH}_2-$	A-1.2
Pentacosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{23} \cdot \text{CH}_2-$	A-1.2
Pentadecanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_{13} \cdot \text{CO}-$	C-403.1
Pentadecyl	$\text{CH}_3 \cdot [\text{CH}_2]_{13} \cdot \text{CH}_2-$	A-1.2
Pentafluorothio	$\text{F}_5\text{S}-$	C-621.2
Pentalenyl	C_8H_5-	A-21.1, A-24.2
Pentamethylene	$-\text{CH}_2 \cdot [\text{CH}_2]_3 \cdot \text{CH}_2-$	A-4.2
<i>pentanedioyl, see</i> Glutaryl		
<i>pentanoyl, see</i> Valeryl		
Pentaphenyl (from pentaphene)	$\text{C}_{22}\text{H}_{13}-$	A-21.1, A-24.2
Pentazolyl	$\text{N} : \text{N} : \text{N} : \text{N} : \text{N}-$ 	B-1, B-5.11
Pentenyl (2- <i>shown</i>)	$\text{CH}_3 \cdot \text{CH}_2 \cdot \text{CH} : \text{CH} \cdot \text{CH}_2-$	A-3.5
2-Penten-4-ynyl	$\text{CH} \equiv \text{C} \cdot \text{CH} = \text{CH} \cdot \text{CH}_2-$	A-3.5
Pentyl (<i>replacing amyl</i>)	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{CH}_2-$	A-1.2
<i>tert</i> -Pentyl (<i>unsubstituted only</i>)	$\text{C}_2\text{H}_5 \cdot \text{C}(\text{CH}_3)_2-$	A-2.25
Pentylidene	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{CH} =$	A-4.1
Pentylidyne	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{C} \equiv$	A-4.1
Pentyloxy	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{CH}_2 \cdot \text{O}-$	C-205.1
Perchloryl	$\text{O}_3\text{Cl}-$	C-10.1, C-106.2
Perimidinyl	$\text{N}_2\text{C}_{11}\text{H}_7-$	B-2.11, B-5.11
Perylenyl	$\text{C}_{20}\text{H}_{11}-$	A-21.1, A-24.2
Phenacyl	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{CH}_2-$	C-318.1
Phenacylidene	$\text{C}_6\text{H}_5 \cdot \text{CO} \cdot \text{CH} =$	C-318.1
Phenalenyl	C_{13}H_9-	A-21.1, A-24.2
Phenanthridinyl	$\text{NC}_{13}\text{H}_8-$	B-2.11, B-5.11
Phenanthrolinyl	$\text{H}_2\text{C}_{12}\text{H}_7-$	B-2.11, B-5.11

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Phenanthryl	$C_{14}H_9-$	A-24.2
Phenanthrylene	$-C_{14}H_8-$	A-24.4
Phenarsazinyll	$AsNC_{12}H_7-$	B-2.11, B-5.11
Phenazinyll	$N_2C_{12}H_7-$	B-2.11, B-5.11
Phenethyl	$C_6H_5 \cdot CH_2 \cdot CH_2-$	A-13.3
Phenetidino (<i>o</i> -, <i>m</i> -, or <i>p</i> -)	$C_2H_5O \cdot C_6H_4 \cdot NH-$	C-811.4
Phenothiazinyll	$SNC_{12}H_8-$	B-2.11, B-5.11
Phenoxathiinyll	$OSC_{12}H_7-$	B-2.11, B-5.11
Phenoxazinyll	$ONC_{12}H_8-$	B-2.11, B-5.11
Phenoxy	$C_6H_5 \cdot O-$	C-205.1
Phenyl	C_6H_5-	A-13.1
Phenylacetyl	$C_6H_5 \cdot CH_2 \cdot CO-$	C-12.7, C-404.1
Phenylazo	$C_6H_5 \cdot N:N-$	C-912.3
Phenylazoxy	$C_6H_5 \cdot N_2O-$	C-913.1
Phenylcarbamoyl	$C_6H_5 \cdot NH \cdot CO-$	C-431.2
Phenylene	$-C_6H_4-$	A-11.6
Phenylenebisazo	$-N:N \cdot C_6H_4 \cdot N:N-$	C-912.5
Phenylimino	$C_6H_5 \cdot N=$	C-815.3
2-phenylpropanoyl, <i>see</i> Hydratropoyl		
3-phenylpropenoyl, <i>see</i> Cinnamoyl		
3-Phenylpropyl	$C_6H_5 \cdot CH_2 \cdot CH_2 \cdot CH_2-$	A-61.2
Phenylsulfamoyl	$C_6H_5 \cdot NH \cdot SO_2-$	C-661.2
Phenylsulfinyl	$C_6H_5 \cdot SO-$	C-631.1
Phenylsulfonyl	$C_6H_5 \cdot SO_2-$	C-631.1
Phenylsulfonylamino	$C_6H_5 \cdot SO_2 \cdot NH-$	C-641.7, C-641.8, C-823.1
Phenylthio	$C_6H_5 \cdot S-$	C-514.1
3-Phenylureido	$C_6H_5 \cdot NH \cdot CO \cdot NH-$	C-971.2
Phthalamoyl	$NH_2 \cdot CO \cdot C_6H_4 \cdot CO-$ (<i>o</i> -)	C-431.1, C-431.2
Phthalazinyll	$N_2C_8H_5-$	B-2.11, B-5.11
Phthalidyl	$C_6H_4 \cdot CO \cdot O \cdot CH-$	B-5.11, C-473.1
	$\boxed{}$	
Phthalidylidene	$C_6H_4 \cdot CO \cdot O \cdot C=$	B-5.12, C-473.1
	$\boxed{}$	
Phthalimido	$CO \cdot C_6H_4 \cdot CO \cdot N-$	C-827.2
	$\boxed{}$	
Phthaloyl (<i>preferred to</i> 1,2-benzenedicarbonyl)	$-CO \cdot C_6H_4 \cdot CO-$ (<i>o</i> -)	C-404.1
Phytyl [<i>for</i> (<i>E</i>)-(7 <i>R</i> ,11 <i>R</i>)-3,7,11,15- tetramethyl-2-hexadecenyl]	$C_{20}H_{39}-$	A-75.1
Picenyl	$C_{22}H_{13}-$	A-21.1, A-24.2
Picryl	$2,4,6-(NO_2)_3C_6H_2-$	C-202.2
Pimeloyl (<i>unsubstituted only</i>)	$-CO \cdot [CH_2]_5 \cdot CO-$	C-404.1
Pinanyl	$C_{10}H_{17}-$	A-72.1, A-75.2
Pinanylene	$-C_{10}H_{16}-$	A-72.1, A-75.2
Pinanylidene	$C_{10}H_{16}=$	A-72.1, A-75.2
Piperazinyll	$N_2C_4H_9-$	B-2.12, B-5.11
Piperidino (1- <i>position only</i>)	$C_5H_{10}N-$	B-2.12, B-5.11
Piperidyl	$NC_5H_{10}-$	B-2.12, B-5.11
Piperidylidene	$NC_5H_9=$	B-5.12
Piperonyl	$3,4-CH_2O_2 \cdot C_6H_3 \cdot CH_2-$	(<i>cf.</i> C-411.1)
Piperonylidene	$3,4-CH_2O_2 \cdot C_6H_3 \cdot CH=$	A-13.4 (<i>cf.</i> C-411.1)
Piperonyloyl (<i>preferred to</i> 3,4-methylenedioxybenzoyl)	$3,4-CH_2O_2 \cdot C_6H_3 \cdot CO-$	C-411.1
Pivaloyl (<i>unsubstituted only</i>)	$(CH_3)_3C \cdot CO-$	C-404.1

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Pleiadenyl	$C_{18}H_{11}-$	A-21.1, A-24.2
Polythio	$-S_n-$	C-515.1
Prolyl	$NH \cdot CH_2 \cdot CH_2 \cdot CH_2 \cdot CH \cdot CO-$ 	C-421.1
<i>propanedioyl, see Malonyl</i>		
Propane-1,3-diyl-2-ylidene	$-CH_2-C-CH_2-$ 	A-4.5
Propane-1,2,3-triyl	$-CH_2-CH-CH_2-$ 	A-4.5
<i>propanoyl, see Propionyl</i>		
Propan-1-yl-3-ylidene	$=CH \cdot CH_2 \cdot CH_2-$	A-4.4
<i>propargyl, see 2-Propynyl</i>		
<i>propenoyl, see Acryloyl</i>		
1-Propenyl	$CH_3 \cdot CH : CH-$	A-3.5
<i>2-propenyl, see Allyl</i>		
Propenylene	$-CH_2 \cdot CH : CH-$	A-4.3
Propioloyl (<i>preferred to propynoyl</i>)	$CH : C : CO-$	C-404.1
Propionamido	$CH_3 \cdot CH_2 \cdot CO \cdot NH-$	C-823.1
Propionyl (<i>preferred to propanoyl</i>)	$CH_3 \cdot CH_2 \cdot CO-$	C-404.1
Propionylamino	$CH_3 \cdot CH_2 \cdot CO \cdot NH-$	C-823.1
Propionyloxy	$CH_3 \cdot CH_2 \cdot CO \cdot O-$	C-463.3
Propoxy	$CH_3 \cdot CH_2 \cdot CH_2 \cdot O-$	C-205.1
Propyl	$CH_3 \cdot CH_2 \cdot CH_2-$	A-1.2
Propylene	$-CH(CH_3) \cdot CH_2-$	A-4.2
Propylidene	$CH_3 \cdot CH_2 \cdot CH=$	A-4.1
Propylidyne	$CH_3 \cdot CH_2 \cdot C \equiv$	A-4.1
<i>propynoyl, see Propioloyl</i>		
1-Propynyl	$CH_3 \cdot C : C-$	A-3.5
2-Propynyl	$HC : C \cdot CH_2-$	A-3.5
Protocatechuoyl (<i>preferred to 3,4-dihydroxybenzoyl</i>)	$3,4-(HO)_2C_6H_3 \cdot CO-$	C-411.1
Pteridinyl	$N_4C_6H_3-$	B-2.11, B-5.11
Purinyl	$N_4C_5H_3-$	B-2.11, B-5.11
Pyranthrenyl	$C_{30}H_{15}-$	A-21.1, A-24.2
Pyranyl	OC_5H_5-	B-2.11, B-5.11
Pyranylidene	$OC_5H_4=$	B-2.11, B-5.12
Pyrazinyl	$N_2C_4H_3-$	B-2.11, B-5.11
Pyrazolidinyl	$N_2C_3H_7-$	B-2.12, B-5.11
Pyrazolinyl	$N_2C_3H_5-$	B-2.12, B-5.11
Pyrazolyl	$N_2C_3H_3-$	B-2.11, B-5.11
Pyrenyl	$C_{16}H_9-$	A-21.1, A-24.2
Pyridazinyl	$N_2C_4H_3-$	B-2.11, B-5.11
2-Pyridinecarbonyl	$NC_5H_4 \cdot CO-$	C-401.2, C-403.2
<i>3-pyridinecarbonyl, see Nicotinoyl</i>		
<i>4-pyridinecarbonyl, see Isonicotinoyl</i>		
Pyridinio	$+NC_5H_5-$	C-82.1, C-85.1
Pyridyl	NC_5H_4-	B-2.11, B-5.11
2-Pyridylcarbonyl	$NC_5H_4 \cdot CO-$	C-403.2
Pyridyloxy	$NC_5H_4 \cdot O-$	C-205.1
Pyrimidinyl	$N_2C_4H_3-$	B-2.11, B-5.11
Pyrrolidinyl	NC_4H_8-	B-2.12, B-5.11
Pyrrolinyl	NC_4H_6-	B-2.12, B-5.11
Pyrrolyl	NC_4H_4-	B-2.11, B-5.11
Pyruvoyl	$CH_3 \cdot CO \cdot CO-$	C-416.3
Quinazolinyl	$N_2C_6H_5-$	B-2.11, B-5.11
Quinolinediyl	$-NC_9H_5-$	B-2.11, B-5.13
Quinoliziny	NC_9H_8-	B-2.11, B-5.11

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Quinoly	NC_6H_5-	B-2.11, B-5.11
Quinoxaliny	$\text{N}_2\text{C}_8\text{H}_5-$	B-2.11, B-5.11
Quinuclidiny	$\text{NC}_7\text{H}_{12}-$	B-2.12, B-5.11
Rubicenyl	$\text{C}_{26}\text{H}_{18}-$	A-21.1, A-24.2
Salicyl (<i>preferred to 2-hydroxybenzyl</i>)	$o\text{-HO}\cdot\text{C}_6\text{H}_4\cdot\text{CH}_2-$	A-13.3, C-201.4
Salicylidene (<i>preferred to 2-hydroxybenzylidene</i>)	$o\text{-HO}\cdot\text{C}_6\text{H}_4\cdot\text{CH}=\text{}$	A-13.4, C-201.4
Salicyloyl (<i>preferred to o-hydroxybenzoyl</i>)	$o\text{-HO}\cdot\text{C}_6\text{H}_4\cdot\text{CO}-$	C-411.1
Sarcosyl	$\text{CH}_3\cdot\text{NH}\cdot\text{CH}_2\cdot\text{CO}-$	C-421.1
Sebacoyl (<i>unsubstituted only</i>)	$-\text{CO}\cdot[\text{CH}_2]_8\cdot\text{CO}-$	C-404.1
Seleneno	$\text{HOSe}-$	C-701.1
Selenino	$\text{HO}_2\text{Se}-$	C-701.1
Seleninyl	$\text{OSe}-$	C-701.1
Seleno	$-\text{Se}-$	C-701.1
Selenocyanato	$\text{NC}\cdot\text{Se}-$	C-833.1
Selenoformyl	$\text{HSeC}-$	C-701.1
Selenonio	$^+\text{H}_2\text{Se}-$ (ion)	C-82.1, C-85, C-87.1
Selenono	$\text{HO}_3\text{Se}-$	C-701.1
Selenonyl	$\text{O}_2\text{Se}-$	C-701.1
Selenoureido	$\text{H}_2\text{N}\cdot\text{CSe}\cdot\text{NH}-$	C-971.2, C-974.1
Selenoxo	$(\text{C})=\text{Se}$	C-701.1
Semicarbazido	$\text{H}_2\text{N}\cdot\text{CO}\cdot\text{NH}\cdot\text{NH}-$	C-981.2
Semicarbazono	$\text{H}_2\text{N}\cdot\text{CO}\cdot\text{NH}\cdot\text{N}=\text{}$	C-982.1
Seryl	$\text{HO}\cdot\text{CH}_2\cdot\text{CH}(\text{NH}_2)\cdot\text{CO}-$	C-421.1
Stearoyl (<i>unsubstituted only</i>)	$\text{CH}_3\cdot[\text{CH}_2]_{16}\cdot\text{CO}-$	C-404.1
Styryl	$\text{C}_6\text{H}_5\cdot\text{CH}:\text{CH}-$	A-13.3
Suberoyl (<i>unsubstituted only</i>)	$-\text{CO}\cdot[\text{CH}_2]_6\cdot\text{CO}-$	C-404.1
Succinamoyl	$\text{NH}_2\cdot\text{CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CO}-$	C-431.2
Succinimido	$\text{CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CO}\cdot\text{N}-$	C-827.2
Succinimidoyl	$-\text{C}(:\text{NH})\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{C}(:\text{NH})-$	C-451.2
Succinyl (<i>preferred to butanedioyl</i>)	$-\text{CO}\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CO}-$	C-404.1
Sulfamoyl	$\text{NH}_2\cdot\text{SO}_2-$	C-641.8
Sulfanilamido	$p\text{-NH}_2\cdot\text{C}_6\text{H}_4\cdot\text{SO}_2\cdot\text{NH}-$	C-641.8
Sulfanilyl	$p\text{-H}_2\text{N}\cdot\text{C}_6\text{H}_4\cdot\text{SO}_2-$	C-641.1, C-641.7
Sulfenamoyl	$\text{NH}_2\cdot\text{S}-$	C-641.8
Sulfeno	$\text{HO}\cdot\text{S}-$	C-641.2
Sulfido	$-\text{S}-$ (ion)	C-86.2, C-511.4
Sulfinamoyl	$\text{NH}_2\cdot\text{SO}-$	C-641.8
Sulfino	$\text{HO}_2\text{S}-$	C-641.2
Sulfinyl	$-\text{SO}-$	C-631.2, C-661.3
Sulfo	$\text{HO}\cdot\text{SO}_2-$	C-10.3, C-641.2
Sulfoamino	$\text{HO}_2\text{S}\cdot\text{NH}-$	C-661.2
Sulfonato	$-\text{O}_3\text{S}-$	C-86.1
Sulfonio	$^+\text{H}_2\text{S}-$ (ion)	C-82.1, C-85, C-87.1
Sulfonyl	$-\text{SO}_2-$	C-631.1, C-631.2, C-661.3
Sulfonyldioxy	$-\text{O}\cdot\text{SO}_2\cdot\text{O}-$	C-72.2, C-205.2

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Tartaroyl (<i>preferred to</i> 2,3-dihydroxybutanedioyl)	$\text{—OC} \cdot \text{CH(OH)} \cdot \text{CH(OH)} \cdot \text{CO—}$	C-411.1
Tartronoyl (<i>preferred to</i> hydroxypropanedioyl)	$\text{—CO} \cdot \text{CH(OH)} \cdot \text{CO—}$	C-411.1
Tauryl	$\text{H}_2\text{N} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{SO}_2\text{—}$	C-641.7
Telluro	Te replacing O	C-701.2
(Tercyclohexan)yl	$\text{C}_6\text{H}_{11} \cdot \text{C}_6\text{H}_{10} \cdot \text{C}_6\text{H}_{10}\text{—}$	A-54.1, C-71.2
Terephthaloyl (<i>preferred to</i> 1,4-benzenedicarbonyl)	$\text{—CO} \cdot \text{C}_6\text{H}_4 \cdot \text{CO—}$ (<i>p</i> -)	C-404.1
Terphenyl	$\text{C}_6\text{H}_5 \cdot \text{C}_6\text{H}_4 \cdot \text{C}_6\text{H}_5\text{—}$	A-54.3, C-71.2
(Terthiophen)yl	$\text{SC}_4\text{H}_3 \cdot \text{SC}_4\text{H}_2 \cdot \text{SC}_4\text{H}_2\text{—}$	C-71.1, C-71.2
Tetracontyl	$\text{CH}_3 \cdot [\text{CH}_2]_{38} \cdot \text{CH}_2\text{—}$	A-1.2
Tetracosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{22} \cdot \text{CH}_2\text{—}$	A-1.2
Tetradecanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_{12} \cdot \text{CO—}$	C-403.1
Tetradecyl	$\text{CH}_3 \cdot [\text{CH}_2]_{12} \cdot \text{CH}_2\text{—}$	A-1.2
Tetramethylene	$\text{—CH}_2 \cdot [\text{CH}_2]_2 \cdot \text{CH}_2\text{—}$	A-4.2
Tetraphenylenyl	$\text{C}_{24}\text{H}_{16}\text{—}$	A-21.1, A-24.2
Tetrazolyl	$\text{N}_4\text{CH—}$	B-1, B-5.11
Thenoyl (2- <i>shown</i>) (<i>preferred to</i> thiophenecarbonyl)	$\text{S} \cdot \text{CH} : \text{CH} \cdot \text{CH} : \text{C} \cdot \text{CO—}$ $\quad \quad \quad \quad \quad \quad $	C-404.1
Thenyl	$\text{SC}_4\text{H}_3 \cdot \text{CH}_2\text{—}$	B-5.11
Thenylidene	$\text{SC}_4\text{H}_3 \cdot \text{CH=}$	B-5.11
Thianthrenyl	$\text{S}_2\text{C}_{12}\text{H}_7\text{—}$	B-2.11, B-5.11
Thiazinyl	$\text{SNC}_4\text{H}_4\text{—}$	B-1, B-5.11
Thiazolidinyl	$\text{SNC}_3\text{H}_6\text{—}$	B-1, B-5.11
Thiazolinyl	$\text{SNC}_3\text{H}_4\text{—}$	B-1, B-5.11
Thiazolyl	$\text{SNC}_3\text{H}_2\text{—}$	B-1, B-5.11
Thienyl	$\text{SC}_4\text{H}_3\text{—}$	B-2.11, B-5.11
Thio	—S—	C-72.1, C-514.1, C-661.3
Thioacetyl	$\text{CH}_3 \cdot \text{CS—}$	C-541.2
Thiobenzoyl	$\text{C}_6\text{H}_5 \cdot \text{CS—}$	C-541.2
Thiocarbamoyl	$\text{H}_2\text{N} \cdot \text{CS—}$	C-431.2, C-547.1
Thiocarbazono	$\text{HN} : \text{N} \cdot \text{CS} \cdot \text{NH} \cdot \text{NH—}$ (and tautomers)	C-985.1
Thiocarbodiazono	$\text{HN} : \text{N} \cdot \text{CS} \cdot \text{N} : \text{N—}$ (and tautomers)	C-985.1
Thiocarbonohydrazido	$\text{H}_2\text{N} \cdot \text{NH} \cdot \text{CS} \cdot \text{NH} \cdot \text{NH—}$	C-985.1
Thiocarbonyl	—CS— , SC<	C-108.2, C-543.2, C-545.1
Thiocarboxy	HSOC—	C-541.1
Thiocyanato	NCS—	C-833.1
Thioformyl	SHC—	C-531.3, C-543.4
thionaphthenyl, <i>see</i> Benzo[<i>b</i>]thienyl		
thiophanthrenyl, <i>see</i> Naphtho- [2,3- <i>b</i>]thienyl		
thiophenecarbonyl, <i>see</i> Thenoyl		
Thiosemicarbazido	$\text{H}_2\text{N} \cdot \text{CS} \cdot \text{NH} \cdot \text{NH—}$	C-985.1
Thiosulfino	$\text{HOS}_2\text{—}$	C-641.3
Thiosulfo	$\text{HO}_2\text{S}_2\text{—}$	C-641.3
Thioureido	$\text{H}_2\text{N} \cdot \text{CS} \cdot \text{NH—}$	C-971.2, C-974.1
Thioxo	S=	C-532.3
Threonyl	$\text{CH}_3 \cdot \text{CH(OH)} \cdot \text{CH(NH}_2\text{)} \cdot \text{CO—}$	C-421.1
Thujenyl	$\text{C}_{10}\text{H}_{15}\text{—}$	A-72.1, A-75.2
Thujyl	$\text{C}_{10}\text{H}_{17}\text{—}$	A-72.1, A-75.2
Thyronyl	$\text{p-(p-HO} \cdot \text{C}_6\text{H}_4 \cdot \text{O)} \cdot \text{C}_6\text{H}_4 \cdot \text{CH}_2 \cdot \text{CH(NH}_2\text{)} \cdot \text{CO—}$	C-421.1
Toluenesulfonyl (<i>cf.</i> Tosyl)	$\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2\text{—}$	C-631.1, C-641.7
Toluidino (<i>o</i> -, <i>m</i> -, and <i>p</i> -)	$\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{NH—}$	C-811.4

LIST OF RADICAL NAMES

Radical name	Formula	Based on rule no.
Toluoyl (<i>o</i> -, <i>m</i> -, and <i>p</i> -) (<i>preferred to methylbenzenecarbonyl</i>)	$\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{CO}-$	C-404.1
Tolyl (<i>o</i> -, <i>m</i> -, and <i>p</i> -)	$\text{CH}_3 \cdot \text{C}_6\text{H}_4-$	A-13.1
Tolylsulfonyl	$\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2-$	C-631.1
Tosyl (<i>p</i> - only)	<i>p</i> - $\text{CH}_3 \cdot \text{C}_6\text{H}_4 \cdot \text{SO}_2-$	C-641.7
Triacetyl	$\text{CH}_3 \cdot [\text{CH}_2]_{28} \cdot \text{CH}_2-$	A-1.2
Triazano	$\text{H}_2\text{N} \cdot \text{NH} \cdot \text{NH}-$	C-942.3
Triazaphenanthryl	$\text{N}_3\text{C}_{11}\text{H}_6-$	B-4.1, B-5.21
Triazeno	$\text{NH}_2 \cdot \text{N} : \text{N}-$	C-942.3
Triazinyl	$\text{N}_3\text{C}_3\text{H}_2-$	B-1, B-5.11
Triazolidinyl	$\text{N}_3\text{C}_2\text{H}_6-$	B-1, B-5.11
Triazolyl	$\text{N}_3\text{C}_2\text{H}_2-$	B-1, B-5.11
Trichlorothio	$\text{Cl}_3\text{S}-$	C-621.2
Tricosyl	$\text{CH}_3 \cdot [\text{CH}_2]_{21} \cdot \text{CH}_2-$	A-1.2
Tridecanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_{11} \cdot \text{CO}-$	C-403.1
Tridecyl	$\text{CH}_3 \cdot [\text{CH}_2]_{11} \cdot \text{CH}_2-$	A-1.2
Trifluorothio	$\text{F}_3\text{S}-$	C-621.2
3,4,5-trihydroxybenzoyl, <i>see</i> Galloyl		
Trimethylammonio	$(\text{CH}_3)_3\text{N}^+$	C-82.1, C-85, C-87.1, C-816.3
Trimethylanilino (all isomers)	$(\text{CH}_3)_3\text{C}_6\text{H}_2 \cdot \text{NH}-$	C-811.4
1,2,2-trimethyl-1,3-cyclopentane-dicarbonyl, <i>see</i> Camphoroyl		
Trimethylene	$-\text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2-$	A-4.2
Trimethylenedioxy	$-\text{O} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{O}-$	C-72.2, C-205.2
Trinaphthylenyl	$\text{C}_{30}\text{H}_{17}-$	A-21.1, A-24.2
Triphenylenyl	$\text{C}_{18}\text{H}_{11}-$	A-21.1, A-24.2
Triphenylmethyl (<i>cf.</i> Trityl)	$(\text{C}_6\text{H}_5)_3\text{C}-$	C-81.1 (<i>cf.</i> A-13.3)
Trithiadiazaindenyl	$\text{S}_3\text{N}_2\text{C}_4\text{H}_7-$	B-4.1, B-5.21
Trithio	$-\text{S}_3-$	C-515.1
Trithiosulfo	$\text{HS} \cdot \text{S}_3-$	C-641.1, C-641.2
Tritriacontyl	$\text{CH}_3 \cdot [\text{CH}_2]_{31} \cdot \text{CH}_2-$	A-1.2
Trityl (<i>cf.</i> Triphenylmethyl)	$(\text{C}_6\text{H}_5)_3\text{C}-$	A-13.3 (<i>cf.</i> C-81.1)
Tropoyl (<i>preferred to 3-hydroxy-2-phenylpropanoyl</i>)	$\text{C}_6\text{H}_5 \cdot \text{CH}(\text{CH}_2 \cdot \text{OH}) \cdot \text{CO}-$	C-411.1
Tryptophyl	$\text{NC}_8\text{H}_6 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.2
Tyrosyl	<i>p</i> - $\text{HO} \cdot \text{C}_6\text{H}_4 \cdot \text{CH}_2 \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1
Undecanoyl	$\text{CH}_3 \cdot [\text{CH}_2]_9 \cdot \text{CO}-$	C-403.1
Undecyl	$\text{CH}_3 \cdot [\text{CH}_2]_9 \cdot \text{CH}_2-$	A-1.2
Ureido	$\text{NH}_2 \cdot \text{CO} \cdot \text{NH}-$	C-971.2
Ureylene	$-\text{NH} \cdot \text{CO} \cdot \text{NH}-$	C-72.2, C-971.3
Valeryl	$\text{CH}_3 \cdot [\text{CH}_2]_3 \cdot \text{CO}-$	C-404.1
Valyl	$(\text{CH}_3)_2\text{CH} \cdot \text{CH}(\text{NH}_2) \cdot \text{CO}-$	C-421.1
Vanilloyl (<i>preferred to 4-hydroxy-3-methoxybenzoyl</i>)	$3,4-\text{CH}_3\text{O} \cdot (\text{HO})\text{C}_6\text{H}_3 \cdot \text{CO}-$	C-411.1
Vanillyl	$3,4-\text{CH}_3\text{O} \cdot (\text{HO})\text{C}_6\text{H}_3 \cdot \text{CH}_2-$	<i>cf.</i> A-13.3, C-201.4, C-411.1
Vanillylidene	$3,4-\text{CH}_3\text{O} \cdot (\text{HO})\text{C}_6\text{H}_3 \cdot \text{CH}=\text{}$	<i>cf.</i> A-13.4, C-201.4, C-411.1
Veratroyl (<i>preferred to 3,4-dimethoxybenzoyl</i>)	$3,4-(\text{CH}_3\text{O})_2\text{C}_6\text{H}_3 \cdot \text{CO}-$	C-411.1
Veratryl	$3,4-(\text{CH}_3\text{O})_2\text{C}_6\text{H}_3 \cdot \text{CH}_2-$	<i>cf.</i> A-13.3, C-201.4, C-411.1
Veratrylidene	$3,4-(\text{CH}_3\text{O})_2\text{C}_6\text{H}_3 \cdot \text{CH}=\text{}$	<i>cf.</i> A-13.4, C-201.4, C-411.1
Vinyl	$\text{CH}_2 : \text{CH}-$	A-3.5
Vinylene	$-\text{CH} : \text{CH}-$	A-4.3
Vinylidene	$\text{CH}_2 : \text{C}=\text{}$	A-4.1
Violanthrenyl	$\text{C}_{34}\text{H}_{19}-$	A-23.1, A-24.2

LIST OF RADICAL NAMES

SECTION

<i>Radical name</i>	<i>Formula</i>	<i>Based on rule no.</i>
Xanthenyl	$\text{OC}_{13}\text{H}_9-$	B-2.11, B-5.11
Xylidino	$(\text{CH}_3)_2\text{C}_6\text{H}_3\cdot\text{NH}-$	C-811.4
Xyl yl	$(\text{CH}_3)_2\text{C}_6\text{H}_3-$	A-13.1