Gmelin Handbook of Inorganic Chemistry

8th Edition

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Formula Index

2nd Supplement Volume 1

Ac–$B_{1,8}$

Gmelin Handbook of Inorganic Chemistry

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INDEX

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2nd Supplement Volume 1

Ac–$B_{1.9}$

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The following Gmelin Formula Index volumes have been published up to now:

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Volume 4	C_4-C_7
Volume 5	C_8-C_{12}
Volume 6	C_{13}-C_{23}
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Formula Index 2nd Supplement

Volume 1	Ac-$B_{1.9}$

Preface

The Gmelin Formula Index and its First Supplement covered those volumes of the Eighth Edition of the Gmelin Handbook which had been issued up to the end of 1979.

The present Second Supplement updates the Index by inclusion of the volumes which appeared until the end of 1987. With this Second Supplement all compounds described in the Gmelin Handbook of Inorganic Chemistry in the period between 1922 and 1987 can be located. The basic structure of the Formula Index remained the same as in the previous editions.

Computer techniques were employed in the preparation and print of the Second Supplement. The data acquisition, sorting and further data-handling were performed with the aid of a suite of computer programs developed by staff members of the former "Online Group" of the Gmelin Institute, now at Chemplex GmbH, and the printer, "Universitätsdruckerei H. Stürtz AG, Würzburg".

The present Second Supplement is intended to be the last one which is issued in printed form. The cumulated contents of the Index and its Supplements are contained in the Gmelin Formula Index (GFI) database which is available to the scientific community via STN. This database will be updated annually to reflect the published Handbook volumes as close as possible.

Frankfurt am Main
September 1988

Helga Hartwig

Instructions for the Formula Index

First Column (Empirical Formula)

The empirical formulas are arranged in alphabetical order of the element symbols and by increasing values of the subscripts. Any indefinite subscripts are placed at the end. Ions always appear after the neutral species, whereby positive ions are preceding the negative ones.

H_2O is included in the empirical formula only if it is an integral part of a complex, as written in the second column. Compounds which are isolated only as solvates are found under the empirical formula both including the solvent molecule and excluding it. Multicomponent systems (solid solutions, melts, etc.) are listed under the empirical formulas of their respective components. However, solutions are found only under the solute. Polymers of type $(AB)_n$ are listed under AB.

Second Column (Conventional Formula)

The second column presents a structural formula as it is usually given in the handbook text. In many cases, however, another form is shown if additional structural features could be detailed. For the elements their elemental names are given.

Entries with the same empirical formula but different structural formulas are arranged in the following order: elements or compounds, isotopic species, polymers, hydrates, and multicomponent systems.

For multicomponent systems the components are arranged in the sequence: Inorganic components – organic components – water. The inorganic components are arranged alphabetically, the organic compounds by the number of carbon atoms. If a component is a single element it is always represented by the unsubscripted symbol. The term "system" is used in a restricted sense in this index: It represents equilibrium mixtures described by phase diagrams or sometimes eutectic points only.

Elements and compounds treated extensively in the handbook are subdivided by topics, e.g., physical properties, preparation, electrochemical behavior, or toxicity.

Third Column (Volume and Page Numbers)

The first symbol is the element which is treated in a given volume, followed by an abbreviated form of the type of volume, including the Part or Section. The page numbers are given after a hyphen. Following abbreviations are used for the type of volume:

MVol.	Main Volume (Hauptband)
SVol.	Supplement Volume (Ergänzungsband)
Org. Comp.	Organic Compounds
Org. Verb.	Organische Verbindungen
PFHOrg.	Perfluorohalogenoorganic Compounds of Main Group Elements
SVol.GD	Gmelin-Durrer, Metallurgy of Iron
Biol.Med.Ph.	Bor in Biologie, Medizin und Pharmazie

Volume descriptors like "1st Suppl. Vol. 2" are abbreviated as "SVol. 1/2". For instance, the entry "B: B Comp.SVol. 1/2-345" indicates that the information can be found on page 345 of the Boron volume: Boron Compounds 1st Suppl. Vol. 2.

Ac – $B_{1.979}$

$AgCF_3O_2Se$	$Ag[OSe(O)CF_3]$	F:	PFHOrg.SVol.3-215/6, 224, 241
$AgCF_3O_3S$	$AgOSO_2CF_3$	F:	PFHOrg.SVol.3-62, 80, 93, 104/7
$AgCF_3S$	$AgSCF_3$	F:	PFHOrg.SVol.2-251, 257, 263
$AgCF_3Se$	CF_3SeAg	F:	PFHOrg.SVol.3-215, 223, 241
$AgCH_5O_8U$	$Ag[UO_2OH(CO_3)(H_2O)_2]$	U:	SVol.C13-22/4
$AgCH_7O_9U$	$Ag[UO_2OH(CO_3)(H_2O)_3]$	U:	SVol.C13-22/4
AgCN	AgCN solutions		
	AgCN-HF	F:	SVol.3-220
$AgC_2F_6O_6S_2$	$Ag(OSO_2CF_3)_2$	F:	PFHOrg.SVol.3-62, 80, 104
AgC_2F_9S	$AgCF(SF_5)CF_3 \cdot CH_3CN$	F:	PFHOrg.SVol.3-188, 206/7
AgC_2FrN_2	$FrAg(CN)_2$	Fr:	MVol.-117
$AgC_3ClF_6O_4S_2$	$AgCCl(SO_2CF_3)_2$	F:	PFHOrg.SVol.3-121/2
$AgC_3F_4NO_4$	$NO_2CF_2CF_2C(O)OAg$	F:	PFHOrg.8-9/10
$AgC_3H_2N_3O_2S$	$SN_2C_2(COOAg)NH_2$	S:	S-N Comp.3-93/8, 176/7
AgC_3N_3OS	$SN_2C_2(CN)OAg$	S:	S-N Comp.3-93/8, 168
$AgC_4F_4NO_4$	$NO_2CF_2CFCFC(O)OAg$	F:	PFHOrg.8-11, 25
$AgC_4F_6H_3OS$	$(CF_3)_2C(OCH_3)SAg$	F:	PFHOrg.SVol.2-8
AgC_4F_6N	$[(CF_3)_2C(CN)]Ag$	F:	PFHOrg.9-54
$AgC_4F_9H_3NS$	$AgCF(SF_5)CF_3 \cdot CH_3CN$	F:	PFHOrg.SVol.3-188, 206/7
$AgC_4F_9N_2OS$	$CF_3S(O)(NAg)[NC(CF_3)_2]$	F:	PFHOrg.SVol.3-124, 134/5
$AgC_4HN_2O_4S$	$SN_2C_2(COOH)COOAg$	S:	S-N Comp.3-93/8, 185
$AgC_5Cl_3H_8N_2Rh$	$Ag[Rh(NC_5H_5)(NH_3)Cl_3]$	Rh:	SVol.B2-261
AgC_6F_5S	$AgSC_6F_5$	F:	PFHOrg.SVol.2-254, 263/4
$AgC_6H_4N_3O_3S$	$SN_2C_6H_4 \cdot AgNO_3$	S:	S-N Comp.3-218
$AgC_6H_9O_8U$	$Ag[UO_2(CH_3COO)_3] \cdot x\ H_2O$	U:	SVol.C13-129, 134
$AgC_8Cl_2H_{14}N_4O_4Rh$	$Ag[Rh(CH_3CNOCNOHCH_3)_2Cl_2]$	Rh:	SVol.B2-215
$AgC_8CuH_{20}P_2$	$Cu[CH_2P(CH_3)_2CH_2]_2Ag$	Cu:	Org.Comp.4-64
$AgC_8F_{12}NS_4$	$Ag[(CF_3S)_4C_4N]$	F:	PFHOrg.SVol.2-220/1, 232
$AgC_8FeH_5N_2O$	$Ag[C_5H_5Fe(CO)(CN)_2]$	Fe:	Org.Comp.B11-69
$AgC_8H_{14}I_2N_4O_4Rh$	$Ag[Rh(CH_3CNOCNOHCH_3)_2I_2]$	Rh:	SVol.B2-218
$AgC_{10}FeH_9$	$C_5H_5FeC_5H_4Ag$	Fe:	Org.Verb.A5-239
$AgC_{14}Cl_2H_{10}MnO_8$	$Ag[Mn(OC_6H_3ClCOO)_2(H_2O)_2]$	Mn:	MVol.D2-163
$AgC_{14}H_8MnO_6$	$Ag[Mn(OC_6H_4COO)_2] \cdot C_2H_5OH \cdot 1.5\ H_2O$	Mn:	MVol.D2-159/60
$AgC_{14}H_{10}I_2MnO_8$	$Ag[Mn(OC_6H_3ICOO)_2(H_2O)_2]$	Mn:	MVol.D2-163
$AgC_{14}H_{12}MnO_8$	$Ag[Mn(OC_6H_4COO)_2(H_2O)_2]$	Mn:	MVol.D2-161
$AgC_{16}CuH_8Mn_2O_6$	$[(CO)_3MnC_5H_4]_2CuAg$	Cu:	Org.Comp.2-236
$AgC_{16}H_{14}MnO_7$	$Ag[Mn(OC_6H_4COO)_2] \cdot C_2H_5OH \cdot 1.5\ H_2O$	Mn:	MVol.D2-159/60
$AgC_{22}CuH_{14}Mn_2O_6$	$[(CO)_3MnC_5H_4]_2CuAg \cdot C_6H_6$	Cu:	Org.Comp.2-236
$AgC_{25}H_{22}I_2Sb_2$	$AgI_2[((C_6H_5)_2Sb)_2CH_2]$	Sb:	Org.Comp.1-172
$AgC_{37}H_{30}NSSb_2$	$AgCNS[Sb(C_6H_5)_3]_2$	Sb:	Org.Comp.1-56

$Ag_2Br_2C_{32}Cu_4H_{40}N_4$	$[2\text{-}(CH_3)_2NC_6H_4]_4Cu_4Ag_2Br_2$	Cu:	Org.Comp.4-214/6
Ag_2Br_6Os	$Ag_2[OsBr_6]$	Os:	SVol.1-156
$Ag_2C_4N_4O_2Os$	$Ag_2[OsO_2(CN)_4]$	Os:	SVol.1-178
$Ag_2C_5MnN_6O$	$Ag_2[Mn(CN)_5NO]$	Mn:	MVol.D2-274, 279
–	$Ag_2[Mn(CN)_5{}^{14}NO]$	Mn:	MVol.D2-274
–	$Ag_2[Mn(CN)_5{}^{15}NO]$	Mn:	MVol.D2-274
$Ag_2C_{24}FeH_{16}O_6$	$Ag_2FeC_{24}H_{16}O_6 \cdot 2\,H_2O$	Fe:	Org.Comp.A8-248
$Ag_2C_{34}Cu_4F_6H_{40}N_4O_6S_2$	$[2\text{-}(CH_3)_2NC_6H_4]_4Cu_4Ag_2(O_3SCF_3)_2$	Cu:	Org.Comp.4-214/6
$Ag_2Cl_5H_2ORh$	$Ag_2[RhCl_5(H_2O)]$	Rh:	SVol.B1-88
$Ag_2Cl_6Os_{0.2}Pt_{0.8}$	$Ag_2[Os_{0.2}Pt_{0.8}Cl_6]$	Os:	SVol.1-141
Ag_2Cl_6Os	$Ag_2[OsCl_6]$	Os:	SVol.1-141
$Ag_2Cl_6Rh^-$	$[Ag_2RhCl_6]^-$	Rh:	SVol.B1-111
Ag_2Cl_6Tc	$Ag_2[TcCl_6]$	Tc:	SVol.2-90, 105/6
Ag_2F	Ag_2F		
	Solubility in HF	F:	SVol.3-220
$Ag_2F_{12}H_2$	$H_2FAg_2F_{11}$	F:	SVol.3-201
$Ag_2H_{15}IN_5Rh^{4+}$	$[Rh(NH_3)_5IAg_2]^{4+}$	Rh:	SVol.B2-145
Ag_2O	Ag_2O glasses		
	$Ag_2O\text{-}B_2O_3$	B:	B Comp.SVol.1/1-128
		B:	B Comp.SVol.3/2-24
	$Ag_2O\text{-}B_2O_3\text{-}Na_2O$	B:	B Comp.SVol.1/1-128
	$Ag_2O\text{-}B_2O_3\text{-}P_2O_5$	B:	B Comp.SVol.3/2-24
	$Ag_2O\text{-}B_2O_3\text{-}Tl_2O$	B:	B Comp.SVol.1/1-128
$Ag_2O_4Rh_2$	$Ag_2Rh_2O_4$	Rh:	SVol.B1-41/2
$Ag_2O_9P_2U$	$Ag_2UO_2P_2O_7 \cdot x\,H_2O$	U:	SVol.C14-109
Ag_2S	Ag_2S		
	Solubility in HF	F:	SVol.3-220
Ag_2Se	Ag_2Se	Se:	SVol.A3-284
Ag_2Te	Ag_2Te	Te:	SVol.A2-380
Ag_3BO_3	Ag_3BO_3	B:	B Comp.SVol.3/2-47, 48/9, 51
Ag_3Br_6Rh	$Ag_3[RhBr_6]$	Rh:	SVol.B1-132
$Ag_3C_3H_{11}O_{19}U_2$	$Ag_3[(UO_2)_2OH(CO_3)_3(H_2O)_5]$	U:	SVol.C13-22/4
$Ag_3C_6N_6Rh$	$Ag_3[Rh(CN)_6]$	Rh:	SVol.B1-192
$Ag_3C_6O_{12}Rh$	$Ag_3[Rh(C_2O_4)_3]$	Rh:	SVol.B2-6
$Ag_3C_{24}H_{20}N_{12}O_3Os$	$Ag_3[OsO_3(C_6H_4NHN_2)_4]$	Os:	SVol.1-249
$Ag_3C_{30}H_{60}N_9O_{21}Rh_2S_6$	$[Ag_3Rh_2(OOCCH(NH_2)CH_2CH_2SCH_3)_6](NO_3)_3$	Rh:	SVol.B3-35
Ag_3Cl_6Rh	$Ag_3[RhCl_6]$	Rh:	SVol.B1-111
$Ag_3F_5H_2$	$3\,AgF \cdot 2\,HF$	F:	SVol.3-220
Ag_3F_8U	Ag_3UF_8	U:	SVol.A6-7
		U:	SVol.C8-224, 239
$Ag_3H_9N_3O_9RhS_3$	$Ag_3[Rh(SO_3)_3(NH_3)_3] \cdot 0.5\,H_2O$	Rh:	SVol.B1-150
$Ag_3H_{15}IN_5Rh^{5+}$	$[Rh(NH_3)_5IAg_3]^{5+}$	Rh:	SVol.B2-145
$Ag_3O_{12}RhS_3$	$Ag_3[Rh(SO_4)_3]$	Rh:	SVol.B1-160
$Ag_4Au_2C_{34}F_6H_{40}N_4O_6S_2$	$((CH_3)_2NC_6H_4)_4Au_2Ag_4(OSO_2CF_3)_2$	Au:	Org.Comp.-273