

Symbol	Typ	Titel
C	Sektion	SECTION C — CHEMISTRY; METALLURGY
C01	Untersektion	CHEMISTRY
C01	Klasse	INORGANIC CHEMISTRY (processing powders of inorganic compounds preparatory to the manufacturing of ceramic products C04B 35/00; fermentation or enzyme-using processes for the preparation of elements or inorganic compounds except carbon dioxide C12P 3/00; obtaining metal compounds from mixtures, e.g. ores, which are intermediate compounds in a metallurgical process for obtaining a free metal C21B, C22B; production of non-metallic elements or inorganic compounds by electrolysis or electrophoresis C25B)
C01B	Unterklasse	NON-METALLIC ELEMENTS; COMPOUNDS THEREOF
		<u>Hydrogen; Hydrides; Water; Synthesis gas from hydrocarbons</u>
C01B 3/00	Hauptgruppe	Hydrogen; Gaseous mixtures containing hydrogen; Separation of hydrogen from mixtures containing it (separation of gases by physical means B01D); Purification of hydrogen (production of water-gas or synthesis gas from solid carbonaceous material C10J); purifying or modifying the chemical compositions of combustible gases containing carbon monoxide C10K) [3]
C01B 3/02	1-Punkt Untergruppe	. Production of hydrogen or of gaseous mixtures containing hydrogen [3]
C01B 3/04	2-Punkt Untergruppe	. . by decomposition of inorganic compounds, e.g. ammonia [3]
C01B 3/06	2-Punkt Untergruppe	. . by reaction of inorganic compounds containing electro-positively bound hydrogen, e.g. water, acids, bases, ammonia, with inorganic reducing agents (by electrolysis of water C25B 1/04) [3]
C01B 3/08	3-Punkt Untergruppe	. . . with metals [3]
C01B 3/10	4-Punkt Untergruppe	 by reaction of water vapour with metals [3]
C01B 3/12	3-Punkt Untergruppe	. . . by reaction of water vapour with carbon monoxide [3]
C01B 3/14	4-Punkt Untergruppe	 Handling of heat and steam [3]
C01B 3/16	4-Punkt Untergruppe	 using catalysts [3]
C01B 3/18	4-Punkt Untergruppe	 using moving solid particles [3]
C01B 3/20	3-Punkt Untergruppe	. . . by reaction of metal hydroxides with carbon monoxide [3]
C01B 3/22	2-Punkt Untergruppe	. . by decomposition of gaseous or liquid organic compounds (coking liquid carbonaceous materials C10B 55/00) [3]
C01B 3/24	3-Punkt Untergruppe	. . . of hydrocarbons [3]
C01B 3/26	4-Punkt Untergruppe	 using catalysts [3]
C01B 3/28	4-Punkt Untergruppe	 using moving solid particles [3]
C01B 3/30	5-Punkt Untergruppe	 using the fluidised bed technique [3]
C01B 3/32	2-Punkt Untergruppe	. . by reaction of gaseous or liquid organic compounds with gasifying agents, e.g. water, carbon dioxide, air [3]
C01B 3/34	3-Punkt Untergruppe	. . . by reaction of hydrocarbons with gasifying agents [3]
C01B 3/36	4-Punkt Untergruppe	 using oxygen or mixtures containing oxygen as gasifying agents [3]
C01B 3/38	4-Punkt Untergruppe	 using catalysts [3]

Symbol	Typ	Titel
C01B 3/40	5-Punkt Untergruppe	 characterised by the catalyst [3]
C01B 3/42	5-Punkt Untergruppe	 using moving solid particles [3]
C01B 3/44	6-Punkt Untergruppe	 using the fluidised bed technique [3]
C01B 3/46	4-Punkt Untergruppe	 using discontinuously preheated non-moving solid materials, e.g. blast and run [3]
C01B 3/48	4-Punkt Untergruppe	 followed by reaction of water vapour with carbon monoxide [3]
C01B 3/50	1-Punkt Untergruppe	. Separation of hydrogen or hydrogen containing gases from gaseous mixtures, e.g. purification (C01B 3/14 takes precedence) [3]
C01B 3/52	2-Punkt Untergruppe	. . by contacting with liquids; Regeneration of used liquids [3]
C01B 3/54	3-Punkt Untergruppe	. . . including a catalytic reaction [3]
C01B 3/56	2-Punkt Untergruppe	. . by contacting with solids; Regeneration of used solids [3]
C01B 3/58	3-Punkt Untergruppe	. . . including a catalytic reaction [3]
C01B 4/00	Hauptgruppe	Hydrogen isotopes; Inorganic compounds thereof prepared by isotope exchange, e.g. $\text{NH}_3 + \text{D}_2 \rightarrow \text{NH}_2\text{D} + \text{HD}$ (separation of isotopes B01D 59/00; other chemical reactions to form compounds of hydrogen isotopes, <u>see</u> the relevant groups for hydrogen compounds in class C01) [2]
C01B 5/00	Hauptgruppe	Water
C01B 5/02	1-Punkt Untergruppe	. Heavy water; Preparation by chemical reaction of hydrogen isotopes or their compounds, e.g. $4\text{ND}_3 + 7\text{O}_2 \rightarrow 4\text{NO}_2 + 6\text{D}_2\text{O}$, $2\text{D}_2 + \text{O}_2 \rightarrow 2\text{D}_2\text{O}$
C01B 6/00	Hauptgruppe	Hydrides of metals; Monoborane or diborane; Addition complexes thereof (higher hydrides of boron, substituted hydrides of boron C01B 35/00) [2]
C01B 6/02	1-Punkt Untergruppe	. Hydrides of transition elements; Addition complexes thereof
C01B 6/04	1-Punkt Untergruppe	. Hydrides of alkali metals, alkaline earth metals, beryllium or magnesium; Addition complexes thereof
C01B 6/06	1-Punkt Untergruppe	. Hydrides of aluminium, gallium, indium, thallium, germanium, tin, lead, arsenic, antimony, bismuth or polonium; Monoborane; Diborane; Addition complexes thereof
C01B 6/10	2-Punkt Untergruppe	. . Monoborane; Diborane; Addition complexes thereof [2]
C01B 6/11	3-Punkt Untergruppe	. . . Preparation from boron or inorganic compounds containing boron and oxygen [2]
C01B 6/13	3-Punkt Untergruppe	. . . Addition complexes of monoborane or diborane, e.g. with phosphine, arsine or hydrazine [2]
C01B 6/15	4-Punkt Untergruppe	 Metal borohydrides; Addition complexes thereof [2]
C01B 6/17	5-Punkt Untergruppe	 Preparation from boron or inorganic compounds containing boron and oxygen [2]
C01B 6/19	5-Punkt Untergruppe	 Preparation from other compounds of boron [2]
C01B 6/21	6-Punkt Untergruppe	 Preparation of borohydrides of alkali metals, alkaline earth metals, magnesium or beryllium; Addition complexes thereof, e.g. $\text{LiBH}_4 \cdot 2\text{N}_2\text{H}_4$, NaB_2H_7 [2]
C01B 6/23	6-Punkt Untergruppe	 Preparation of borohydrides of other metals, e.g. aluminium borohydride; Addition complexes thereof, e.g. $\text{Li}[\text{Al}(\text{BH}_4)_3\text{H}]$ [2]
C01B 6/24	1-Punkt Untergruppe	. Hydrides containing at least two metals, e.g. $\text{Li}(\text{AlH}_4)$; Addition complexes thereof (C01B 6/13-C01B 6/23 take precedence) [2]
C01B 6/26	2-Punkt Untergruppe	. . Preparation from the metal with the highest valency or from its oxides or salts of its oxyacids
C01B 6/34	1-Punkt Untergruppe	. Purification; Stabilisation
<u>Halogens; Compounds thereof</u>		

Symbol	Typ	Titel
C01B 7/00	Hauptgruppe	Halogens; Halogen acids (oxyacids C01B 11/00)
C01B 7/01	1-Punkt Untergruppe	. Chlorine; Hydrogen chloride [2]
C01B 7/03	2-Punkt Untergruppe	. . Preparation from chlorides [2, 3]
C01B 7/04	3-Punkt Untergruppe	. . . Preparation of chlorine from hydrogen chloride [3]
C01B 7/05	3-Punkt Untergruppe	. . . Preparation from ammonium chloride [2, 3]
C01B 7/07	2-Punkt Untergruppe	. . Purification [2, 3]
C01B 7/075	3-Punkt Untergruppe	. . . of liquid chlorine [2, 3]
C01B 7/09	1-Punkt Untergruppe	. Bromine; Hydrogen bromide [2]
C01B 7/13	1-Punkt Untergruppe	. Iodine; Hydrogen iodide [2]
C01B 7/14	2-Punkt Untergruppe	. . Iodine [2]
C01B 7/16	3-Punkt Untergruppe	. . . Preparation from seaweed [2]
C01B 7/19	1-Punkt Untergruppe	. Fluorine; Hydrogen fluoride [2]
C01B 7/20	2-Punkt Untergruppe	. . Fluorine [2]
C01B 7/24	1-Punkt Untergruppe	. Inter-halogen compounds
C01B 9/00	Hauptgruppe	General methods of preparing halides (particular individual halides, <u>see</u> the relevant groups in subclasses C01B-C01G according to the element combined with the halogen; electrolytic production of inorganic compounds C25B)
C01B 9/02	1-Punkt Untergruppe	. Chlorides
C01B 9/04	1-Punkt Untergruppe	. Bromides
C01B 9/06	1-Punkt Untergruppe	. Iodides
C01B 9/08	1-Punkt Untergruppe	. Fluorides
C01B 11/00	Hauptgruppe	Oxides or oxyacids of halogens; Salts thereof
C01B 11/02	1-Punkt Untergruppe	. Oxides of chlorine
C01B 11/04	1-Punkt Untergruppe	. Hypochlorous acid
C01B 11/06	2-Punkt Untergruppe	. . Hypochlorites, e.g. chlorinated lime
C01B 11/08	1-Punkt Untergruppe	. Chlorous acid
C01B 11/10	2-Punkt Untergruppe	. . Chlorites
C01B 11/12	1-Punkt Untergruppe	. Chloric acid
C01B 11/14	2-Punkt Untergruppe	. . Chlorates
C01B 11/16	1-Punkt Untergruppe	. Perchloric acid
C01B 11/18	2-Punkt Untergruppe	. . Perchlorates
C01B 11/20	1-Punkt Untergruppe	. Oxygen compounds of bromine
C01B 11/22	1-Punkt Untergruppe	. Oxygen compounds of iodine
C01B 11/24	1-Punkt Untergruppe	. Oxygen compounds of fluorine

Symbol	Typ	Titel
		<u>Oxygen; Oxides or hydroxides in general; Per-compounds</u>
C01B 13/00	Hauptgruppe	Oxygen; Ozone; Oxides or hydroxides in general
C01B 13/02	1-Punkt Untergruppe	. Preparation of oxygen (by liquefying F25J)
C01B 13/08	2-Punkt Untergruppe	. . from air with the aid of metal oxides, e.g. barium oxide, manganese oxide
C01B 13/10	1-Punkt Untergruppe	. Preparation of ozone
C01B 13/11	2-Punkt Untergruppe	. . by electric discharge [2]
C01B 13/14	1-Punkt Untergruppe	. Methods for preparing oxides or hydroxides in general (particular individual oxides or hydroxides, <u>see</u> the relevant groups of subclasses C01B-C01G or C25B, according to the element combined with the oxygen or hydroxy group)
C01B 13/16	2-Punkt Untergruppe	. . Purification [3]
C01B 13/18	2-Punkt Untergruppe	. . by thermal decomposition of compounds, e.g. of salts or hydroxides [3]
C01B 13/20	2-Punkt Untergruppe	. . by oxidation of elements in the gaseous state; by oxidation or hydrolysis of compounds in the gaseous state [3]
C01B 13/22	3-Punkt Untergruppe	. . . of halides or oxyhalides [3]
C01B 13/24	4-Punkt Untergruppe	 in the presence of hot combustion gases [3]
C01B 13/26	4-Punkt Untergruppe	 in the presence of a fluidised bed [3]
C01B 13/28	4-Punkt Untergruppe	 using a plasma or an electric discharge [3]
C01B 13/30	4-Punkt Untergruppe	 Removal and cooling of the oxide containing suspension [3]
C01B 13/32	2-Punkt Untergruppe	. . by oxidation or hydrolysis of elements or compounds in the liquid or solid state [3]
C01B 13/34	2-Punkt Untergruppe	. . by oxidation or hydrolysis of sprayed or atomised solutions [3]
C01B 13/36	2-Punkt Untergruppe	. . by precipitation reactions in solutions [3]
C01B 15/00	Hauptgruppe	Peroxides; Peroxyhydrates; Peroxyacids or salts thereof; Superoxides; Ozonides
C01B 15/01	1-Punkt Untergruppe	. Hydrogen peroxide [3]
C01B 15/013	2-Punkt Untergruppe	. . Separation; Purification; Concentration [3]
C01B 15/017	3-Punkt Untergruppe	. . . Anhydrous hydrogen peroxide; Anhydrous solutions or gaseous mixtures containing hydrogen peroxide [3]
C01B 15/022	2-Punkt Untergruppe	. . Preparation from organic compounds [2]
C01B 15/023	3-Punkt Untergruppe	. . . by the alkyl-anthraquinone process [3]
C01B 15/024	3-Punkt Untergruppe	. . . from hydrocarbons [3]
C01B 15/026	3-Punkt Untergruppe	. . . from alcohols [3]
C01B 15/027	2-Punkt Untergruppe	. . Preparation from water [3]
C01B 15/029	2-Punkt Untergruppe	. . Preparation from hydrogen and oxygen [3]
C01B 15/03	2-Punkt Untergruppe	. . Preparation from inorganic peroxy-compounds, e.g. from peroxysulfates [3]
C01B 15/032	3-Punkt Untergruppe	. . . from metal peroxides [3]
C01B 15/037	2-Punkt Untergruppe	. . Stabilisation by additives [3]

Symbol	Typ	Titel
C01B 15/04	1-Punkt Untergruppe	. Metal peroxides or peroxyhydrates thereof; Superoxides; Ozonides [3]
C01B 15/043	2-Punkt Untergruppe	. . of alkali metals, alkaline earth metals or of magnesium [2, 3]
C01B 15/047	2-Punkt Untergruppe	. . of heavy metals [2, 3]
C01B 15/055	1-Punkt Untergruppe	. Peroxyhydrates (C01B 15/04 takes precedence); Peroxyacids or salts thereof [3]
C01B 15/06	2-Punkt Untergruppe	. . containing sulfur [3]
C01B 15/08	3-Punkt Untergruppe	. . . Peroxysulfates [3]
C01B 15/10	2-Punkt Untergruppe	. . containing carbon [3]
C01B 15/12	2-Punkt Untergruppe	. . containing boron [3]
C01B 15/14	2-Punkt Untergruppe	. . containing silicon [3]
C01B 15/16	2-Punkt Untergruppe	. . containing phosphorus [3]
C01B 17/00	Hauptgruppe	Sulfur; Compounds thereof
C01B 17/02	1-Punkt Untergruppe	. Preparation of sulfur; Purification
C01B 17/027	2-Punkt Untergruppe	. . Recovery of sulfur from material containing elemental sulfur, e.g. luxmasses; Purification [3]
C01B 17/033	3-Punkt Untergruppe	. . . using a liquid extractant [3]
C01B 17/04	2-Punkt Untergruppe	. . from gaseous sulfur compounds including gaseous sulfides
C01B 17/05	3-Punkt Untergruppe	. . . by wet processes [3]
C01B 17/06	2-Punkt Untergruppe	. . from non-gaseous sulfides or materials containing such sulfides, e.g. ores
C01B 17/10	2-Punkt Untergruppe	. . Finely-divided sulfur, e.g. sublimed sulfur, flowers of sulfur
C01B 17/12	2-Punkt Untergruppe	. . Insoluble sulfur (mu-sulfur)
C01B 17/16	1-Punkt Untergruppe	. Hydrogen sulfides
C01B 17/18	2-Punkt Untergruppe	. . Hydrogen polysulfides
C01B 17/20	1-Punkt Untergruppe	. Methods for preparing sulfides or polysulfides, in general (ammonium sulfides or polysulfides C01C; sulfides or polysulfides of metals, other than alkali metals, magnesium, calcium, strontium, and barium, <u>see</u> the relevant groups of subclasses C01F or C01G, according to the metal)
C01B 17/22	1-Punkt Untergruppe	. Alkali metal sulfides or polysulfides
C01B 17/24	2-Punkt Untergruppe	. . Preparation by reduction
C01B 17/26	3-Punkt Untergruppe	. . . with carbon
C01B 17/28	3-Punkt Untergruppe	. . . with reducing gases
C01B 17/30	2-Punkt Untergruppe	. . Preparation from sodium or potassium amalgam with sulfur or sulfides
C01B 17/32	2-Punkt Untergruppe	. . Hydrosulfides of sodium or potassium
C01B 17/34	2-Punkt Untergruppe	. . Polysulfides of sodium or potassium
C01B 17/36	2-Punkt Untergruppe	. . Purification
C01B 17/38	2-Punkt Untergruppe	. . Dehydration

Symbol	Typ	Titel
C01B 17/40	2-Punkt Untergruppe	. . Making shaped products, e.g. granules
C01B 17/42	1-Punkt Untergruppe	. Sulfides or polysulfides of magnesium, calcium, strontium, or barium
C01B 17/43	2-Punkt Untergruppe	. . from oxides or hydroxides with sulfur or hydrogen sulfide
C01B 17/44	2-Punkt Untergruppe	. . by reduction of sulfates
C01B 17/45	1-Punkt Untergruppe	. Compounds containing sulfur and halogen, with or without oxygen
C01B 17/46	1-Punkt Untergruppe	. Compounds containing sulfur, halogen, hydrogen, and oxygen
C01B 17/48	1-Punkt Untergruppe	. Sulfur dioxide; Sulfurous acid
C01B 17/50	2-Punkt Untergruppe	. . Preparation of sulfur dioxide
C01B 17/52	3-Punkt Untergruppe	. . . by roasting sulfides (C22B 1/00 takes precedence)
C01B 17/54	3-Punkt Untergruppe	. . . by burning elemental sulfur
C01B 17/56	3-Punkt Untergruppe	. . . Separation; Purification
C01B 17/58	3-Punkt Untergruppe	. . . Recovery of sulfur dioxide from acid tar or the like
C01B 17/60	3-Punkt Untergruppe	. . . Isolation of sulfur dioxide from gases
C01B 17/62	1-Punkt Untergruppe	. Methods of preparing sulfites in general (particular individual sulfites, <u>see</u> the relevant groups of subclasses C01B-C01G, according to the cation)
C01B 17/64	1-Punkt Untergruppe	. Thiosulfates; Dithionites; Polythionates
C01B 17/66	2-Punkt Untergruppe	. . Dithionites
C01B 17/69	1-Punkt Untergruppe	. Sulfur trioxide; Sulfuric acid [3]
C01B 17/70	2-Punkt Untergruppe	. . Stabilisation of gamma-form sulfur trioxide
C01B 17/74	2-Punkt Untergruppe	. . Preparation [3]
C01B 17/76	3-Punkt Untergruppe	. . . by contact processes
C01B 17/765	4-Punkt Untergruppe	 Multi-stage SO ₃ -conversion [3]
C01B 17/77	4-Punkt Untergruppe	 Fluidised-bed processes [3]
C01B 17/775	4-Punkt Untergruppe	 Liquid phase contacting processes or wet catalysis processes [3]
C01B 17/78	4-Punkt Untergruppe	 characterised by the catalyst used
C01B 17/79	5-Punkt Untergruppe	 containing vanadium [3]
C01B 17/80	4-Punkt Untergruppe	 Apparatus
C01B 17/82	3-Punkt Untergruppe	. . . of sulfuric acid using a nitrogen oxide process
C01B 17/84	4-Punkt Untergruppe	 Chamber process
C01B 17/86	4-Punkt Untergruppe	 Tower process
C01B 17/88	2-Punkt Untergruppe	. . Concentration of sulfuric acid
C01B 17/90	2-Punkt Untergruppe	. . Separation; Purification

Symbol	Typ	Titel
C01B 17/92	3-Punkt Untergruppe	. . . Recovery from acid tar or the like
C01B 17/94	3-Punkt Untergruppe	. . . Recovery from nitration acids
C01B 17/96	1-Punkt Untergruppe	. Methods for the preparation of sulfates in general (particular individual sulfates, <u>see</u> the relevant groups of subclasses C01B-C01G, according to the cation)
C01B 17/98	1-Punkt Untergruppe	. Other compounds containing sulfur and oxygen (persulfuric acids C01B 15/06; persulfates C01B 15/08)
C01B 19/00	Hauptgruppe	Selenium; Tellurium; Compounds thereof (phosphorus compounds C01B 25/14)
C01B 19/02	1-Punkt Untergruppe	. Elemental selenium or tellurium [3]
C01B 19/04	1-Punkt Untergruppe	. Binary compounds [3]
C01B 21/00	Hauptgruppe	Nitrogen; Compounds thereof
C01B 21/02	1-Punkt Untergruppe	. Preparation of nitrogen (from ammonia C01B 3/04)
C01B 21/04	1-Punkt Untergruppe	. Purification or separation of nitrogen (by liquefying F25J)
C01B 21/06	1-Punkt Untergruppe	. Binary compounds of nitrogen with metals, with silicon, or with boron (azides C01B 21/08)
C01B 21/064	2-Punkt Untergruppe	. . with boron [3]
C01B 21/068	2-Punkt Untergruppe	. . with silicon [3]
C01B 21/072	2-Punkt Untergruppe	. . with aluminium [3]
C01B 21/076	2-Punkt Untergruppe	. . with titanium or zirconium [3]
C01B 21/08	1-Punkt Untergruppe	. Hydrazoic acid; Azides; Halogen azides
C01B 21/082	1-Punkt Untergruppe	. Compounds containing nitrogen and non-metals (C01B 21/06, C01B 21/08 take precedence) [3]
C01B 21/083	2-Punkt Untergruppe	. . containing one or more halogen atoms [3]
C01B 21/084	3-Punkt Untergruppe	. . . containing also one or more oxygen atoms, e.g. nitrosyl halides [3]
C01B 21/086	2-Punkt Untergruppe	. . containing one or more sulfur atoms [3]
C01B 21/087	2-Punkt Untergruppe	. . containing one or more hydrogen atoms [3]
C01B 21/088	3-Punkt Untergruppe	. . . containing also one or more halogen atoms [3]
C01B 21/09	4-Punkt Untergruppe	 Halogeno-amines, e.g. chloramine [3]
C01B 21/092	3-Punkt Untergruppe	. . . containing also one or more metal atoms [3]
C01B 21/093	3-Punkt Untergruppe	. . . containing also one or more sulfur atoms [3]
C01B 21/094	4-Punkt Untergruppe	 Nitrosyl containing acids [3]
C01B 21/096	4-Punkt Untergruppe	 Amidosulfonic acid; Salts thereof [3]
C01B 21/097	2-Punkt Untergruppe	. . containing phosphorus atoms [3]
C01B 21/098	3-Punkt Untergruppe	. . . Phosphonitrilic dihalides; Polymers thereof [3]
C01B 21/12	2-Punkt Untergruppe	. . Carbamic acid; Salts thereof
C01B 21/14	2-Punkt Untergruppe	. . Hydroxylamine; Salts thereof
C01B 21/16	2-Punkt Untergruppe	. . Hydrazine; Salts thereof

Symbol	Typ	Titel
C01B 21/20	1-Punkt Untergruppe	. Nitrogen oxides; Oxyacids of nitrogen; Salts thereof
C01B 21/22	2-Punkt Untergruppe	. . Nitrous oxide (N ₂ O)
C01B 21/24	2-Punkt Untergruppe	. . Nitric oxide (NO)
C01B 21/26	3-Punkt Untergruppe	. . . Preparation by catalytic oxidation of ammonia
C01B 21/28	4-Punkt Untergruppe	 Apparatus
C01B 21/30	3-Punkt Untergruppe	. . . Preparation by oxidation of nitrogen
C01B 21/32	4-Punkt Untergruppe	 Apparatus
C01B 21/34	2-Punkt Untergruppe	. . Nitrogen trioxide (N ₂ O ₃)
C01B 21/36	2-Punkt Untergruppe	. . Nitrogen dioxide (NO ₂ , N ₂ O ₄) (C01B 21/26, C01B 21/30 take precedence)
C01B 21/38	2-Punkt Untergruppe	. . Nitric acid
C01B 21/40	3-Punkt Untergruppe	. . . Preparation by absorption of oxides of nitrogen
C01B 21/42	3-Punkt Untergruppe	. . . Preparation from nitrates
C01B 21/44	3-Punkt Untergruppe	. . . Concentration
C01B 21/46	3-Punkt Untergruppe	. . . Purification; Separation
C01B 21/48	2-Punkt Untergruppe	. . Methods for the preparation of nitrates in general (particular individual nitrates, <u>see</u> the relevant groups of subclasses C01B-C01G, according to the cation)
C01B 21/50	2-Punkt Untergruppe	. . Nitrous acid; Salts thereof
C01B 23/00	Hauptgruppe	Noble gases; Compounds thereof (liquefying F25J)
C01B 25/00	Hauptgruppe	Phosphorus; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; perphosphates C01B 15/16) [3]
C01B 25/01	1-Punkt Untergruppe	. Treating phosphate ores or other raw phosphate materials to obtain phosphorus or phosphorus compounds [2]
C01B 25/02	1-Punkt Untergruppe	. Preparation of phosphorus
C01B 25/023	2-Punkt Untergruppe	. . of red phosphorus [2]
C01B 25/027	2-Punkt Untergruppe	. . of yellow phosphorus [2]
C01B 25/04	1-Punkt Untergruppe	. Purification of phosphorus
C01B 25/043	2-Punkt Untergruppe	. . of red phosphorus [2]
C01B 25/047	2-Punkt Untergruppe	. . of yellow phosphorus [2]
C01B 25/06	1-Punkt Untergruppe	. Hydrogen phosphides
C01B 25/08	1-Punkt Untergruppe	. Other phosphides
C01B 25/10	1-Punkt Untergruppe	. Halides or oxyhalides of phosphorus [2]
C01B 25/12	1-Punkt Untergruppe	. Oxides of phosphorus
C01B 25/14	1-Punkt Untergruppe	. Sulfur, selenium, or tellurium compounds of phosphorus
C01B 25/16	1-Punkt Untergruppe	. Oxyacids of phosphorus; Salts thereof (peroxyacids or salts thereof C01B 15/00)

Symbol	Typ	Titel
C01B 25/163	2-Punkt Untergruppe	. . Phosphorous acid; Salts thereof [2]
C01B 25/165	2-Punkt Untergruppe	. . Hypophosphorous acid; Salts thereof [2]
C01B 25/168	2-Punkt Untergruppe	. . Pyrophosphorous acid; Salts thereof [2]
C01B 25/18	2-Punkt Untergruppe	. . Phosphoric acid
C01B 25/20	3-Punkt Untergruppe	. . . Preparation from elemental phosphorus or phosphoric anhydride
C01B 25/22	3-Punkt Untergruppe	. . . Preparation by reacting phosphate containing material with an acid, e.g. wet process
C01B 25/222	4-Punkt Untergruppe	 with sulfuric acid, a mixture of acids mainly consisting of sulfuric acid or a mixture of compounds forming it <u>in situ</u> , e.g. a mixture of sulfur dioxide, water and oxygen [3]
C01B 25/223	5-Punkt Untergruppe	 only one form of calcium sulfate being formed [3]
C01B 25/225	6-Punkt Untergruppe	 Dihydrate process [3]
C01B 25/226	6-Punkt Untergruppe	 Hemihydrate process [3]
C01B 25/228	5-Punkt Untergruppe	 one form of calcium sulfate being formed and then converted to another form [3]
C01B 25/229	6-Punkt Untergruppe	 Hemihydrate-dihydrate process [3]
C01B 25/231	6-Punkt Untergruppe	 Dihydrate-hemihydrate process [3]
C01B 25/232	5-Punkt Untergruppe	 Preparation by reacting phosphate containing material with concentrated sulfuric acid and subsequently lixiviating the obtained mass, e.g. clinker process [3]
C01B 25/234	3-Punkt Untergruppe	. . . Purification; Stabilisation; Concentration (purification concomitant with preparation C01B 25/22; preparation involving solvent-solvent extraction C01B 25/46) [3]
C01B 25/235	4-Punkt Untergruppe	 Clarification; Stabilisation to prevent post-precipitation of dissolved impurities [3]
C01B 25/237	4-Punkt Untergruppe	 Selective elimination of impurities [3]
C01B 25/238	5-Punkt Untergruppe	 Cationic impurities [3]
C01B 25/24	2-Punkt Untergruppe	. . Condensed phosphoric acids
C01B 25/26	2-Punkt Untergruppe	. . Phosphates (perphosphates C01B 15/16)
C01B 25/28	3-Punkt Untergruppe	. . . Ammonium phosphates
C01B 25/30	3-Punkt Untergruppe	. . . Alkali metal phosphates
C01B 25/32	3-Punkt Untergruppe	. . . Phosphates of magnesium, calcium, strontium, or barium
C01B 25/34	4-Punkt Untergruppe	 Magnesium phosphates
C01B 25/36	3-Punkt Untergruppe	. . . Aluminium phosphates
C01B 25/37	3-Punkt Untergruppe	. . . Phosphates of heavy metals [2]
C01B 25/38	3-Punkt Untergruppe	. . . Condensed phosphates
C01B 25/39	4-Punkt Untergruppe	 of alkali metals [3]
C01B 25/40	4-Punkt Untergruppe	 Polyphosphates [2]
C01B 25/41	5-Punkt Untergruppe	 of alkali metals [3]

Symbol	Typ	Titel
C01B 25/42	4-Punkt Untergruppe	 Pyrophosphates [2]
C01B 25/44	4-Punkt Untergruppe	 Metaphosphates [2]
C01B 25/445	5-Punkt Untergruppe	 of alkali metals [3]
C01B 25/45	3-Punkt Untergruppe	. . . containing plural metal, or metal and ammonium [3]
C01B 25/455	3-Punkt Untergruppe	. . . containing halogen [3]
C01B 25/46	2-Punkt Untergruppe	. . Preparation involving solvent-solvent extraction (solvent extraction in general B01D 11/00) [2]
C01B 31/00	Hauptgruppe	Carbon; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; percarbonates C01B 15/10 ; carbon black C09C 1/48; gas carbon production C10B) [3]
C01B 31/02	1-Punkt Untergruppe	. Preparation of carbon (by using ultra-high pressure, e.g. for the formation of diamonds, B01J 3/06; by crystal growth C30B); Purification
C01B 31/04	2-Punkt Untergruppe	. . Graphite
C01B 31/06	2-Punkt Untergruppe	. . Diamond
C01B 31/08	1-Punkt Untergruppe	. Active carbon
C01B 31/10	2-Punkt Untergruppe	. . Preparation by using gaseous activating agents
C01B 31/12	2-Punkt Untergruppe	. . Preparation by using non-gaseous activating agents
C01B 31/14	2-Punkt Untergruppe	. . Granulation (apparatus B01J 2/00)
C01B 31/16	1-Punkt Untergruppe	. Preparation of ion-exchanging materials from carbonaceous material
C01B 31/18	1-Punkt Untergruppe	. Carbon monoxide (metal carbonyls C01G)
C01B 31/20	1-Punkt Untergruppe	. Carbon dioxide
C01B 31/22	2-Punkt Untergruppe	. . Solidifying
C01B 31/24	1-Punkt Untergruppe	. Methods for the preparation of carbonates or bicarbonates in general (percarbonates C01B 15/10; particular individual carbonates, <u>see</u> the relevant groups of subclasses C01B-C01G, according to the cation)
C01B 31/26	1-Punkt Untergruppe	. Compounds containing carbon and sulfur, e.g. carbon disulfide, carbon oxysulfide; Thiophosgene
C01B 31/28	1-Punkt Untergruppe	. Phosgene
C01B 31/30	1-Punkt Untergruppe	. Carbides (alloys C22)
C01B 31/32	2-Punkt Untergruppe	. . Calcium carbide
C01B 31/34	2-Punkt Untergruppe	. . Tungsten or molybdenum carbides
C01B 31/36	2-Punkt Untergruppe	. . Carbides of silicon or boron
C01B 33/00	Hauptgruppe	Silicon; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; persilicates C01B 15/14; carbides C01B 31/36) [3]
C01B 33/02	1-Punkt Untergruppe	. Silicon (forming single crystals or homogeneous polycrystalline material with defined structure C30B) [5]
C01B 33/021	2-Punkt Untergruppe	. . Preparation (chemical coating from the vapour phase C23C 16/00) [5]
C01B 33/023	3-Punkt Untergruppe	. . . by reduction of silica or silica-containing material [5]
C01B 33/025	4-Punkt Untergruppe	 with carbon or a solid carbonaceous material, i.e. carbo-thermal process [5]

Symbol	Typ	Titel
C01B 33/027	3-Punkt Untergruppe	. . . by decomposition or reduction of gaseous or vaporised silicon compounds other than silica or silica-containing material [5]
C01B 33/029	4-Punkt Untergruppe	 by decomposition of monosilane [5]
C01B 33/03	4-Punkt Untergruppe	 by decomposition of silicon halides or halosilanes or reduction thereof with hydrogen as the only reducing agent [5]
C01B 33/031	5-Punkt Untergruppe	 by decomposition of silicon tetraiodide [5]
C01B 33/033	4-Punkt Untergruppe	 by reduction of silicon halides or halosilanes with a metal or a metallic alloy as the only reducing agents [5]
C01B 33/035	4-Punkt Untergruppe	 by decomposition or reduction of gaseous or vaporised silicon compounds in the presence of heated filaments of silicon, carbon or a refractory metal, e.g. tantalum or tungsten, or in the presence of heated silicon rods on which the formed silicon is deposited, a silicon rod being obtained, e.g. Siemens process [5]
C01B 33/037	2-Punkt Untergruppe	. . Purification (by zone-melting C30B 13/00) [5]
C01B 33/039	3-Punkt Untergruppe	. . . by conversion of the silicon into a compound, optional purification of the compound, and reconversion into silicon [5]
C01B 33/04	1-Punkt Untergruppe	. Hydrides of silicon
C01B 33/06	1-Punkt Untergruppe	. Metal silicides (alloys C22)
C01B 33/08	1-Punkt Untergruppe	. Compounds containing halogen
C01B 33/10	2-Punkt Untergruppe	. . Compounds containing silicon, fluorine, and other elements
C01B 33/107	2-Punkt Untergruppe	. . Halogenated silanes [3]
C01B 33/113	1-Punkt Untergruppe	. Silicon oxides; Hydrates thereof [3]
C01B 33/12	2-Punkt Untergruppe	. . Silica; Hydrates thereof, e.g. lepidic acid [3]
C01B 33/14	3-Punkt Untergruppe	. . . Colloidal silica, e.g. dispersions, gels, sols [3]
C01B 33/141	4-Punkt Untergruppe	 Preparation of hydrosols or aqueous dispersions [3]
C01B 33/142	5-Punkt Untergruppe	 by acidic treatment of silicates [3]
C01B 33/143	6-Punkt Untergruppe	 of aqueous solutions of silicates [3]
C01B 33/145	4-Punkt Untergruppe	 Preparation of hydroorganosols, organosols or dispersions in an organic medium [3]
C01B 33/146	4-Punkt Untergruppe	 After-treatment of sols (preparation of hydroorganosols, organosols or dispersions in an organic medium from hydrosols C01B 33/145) [3]
C01B 33/148	5-Punkt Untergruppe	 Concentration; Drying; Dehydration; Stabilisation; Purification [3]
C01B 33/149	5-Punkt Untergruppe	 Coating [3]
C01B 33/151	5-Punkt Untergruppe	 by progressively adding a sol to a different sol, i.e. "build up" of particles using a "heel" [3]
C01B 33/152	4-Punkt Untergruppe	 Preparation of hydrogels [3]
C01B 33/154	5-Punkt Untergruppe	 by acidic treatment of aqueous silicate solutions [3]
C01B 33/155	4-Punkt Untergruppe	 Preparation of hydroorganogels or organogels [3]
C01B 33/157	4-Punkt Untergruppe	 After-treatment of gels [3]

Symbol	Typ	Titel
C01B 33/158	5-Punkt Untergruppe	 Purification; Drying; Dehydrating [3]
C01B 33/159	5-Punkt Untergruppe	 Coating or hydrophobisation [3]
C01B 33/16	3-Punkt Untergruppe	. . . Preparation of silica xerogels [3]
C01B 33/18	3-Punkt Untergruppe	. . . Preparation of finely divided silica neither in sol nor in gel form; After-treatment thereof (preparation of aerogels by dehydrating gels C01B 33/158; treatment to enhance the pigmenting or filling properties C09C) [3]
C01B 33/187	4-Punkt Untergruppe	 by acidic treatment of silicates [3]
C01B 33/193	5-Punkt Untergruppe	 of aqueous solutions of silicates [3]
C01B 33/20	1-Punkt Untergruppe	. Silicates (persilicates C01B 15/14)
C01B 33/22	2-Punkt Untergruppe	. . Magnesium silicates
C01B 33/24	2-Punkt Untergruppe	. . Alkaline earth metal silicates
C01B 33/26	2-Punkt Untergruppe	. . Aluminium-containing silicates [5]
C01B 33/32	2-Punkt Untergruppe	. . Alkali metal silicates (C01B 33/26 takes precedence) [3]
C01B 33/36	2-Punkt Untergruppe	. . having base-exchange properties but not having molecular sieve properties (regeneration thereof B01J 49/00) [6]
C01B 33/38	3-Punkt Untergruppe	. . . Layered base-exchange silicates, e.g. clays, micas or alkali metal silicates of kenyaite or magadiite type [6]
C01B 33/40	4-Punkt Untergruppe	 Clays [6]
C01B 33/42	4-Punkt Untergruppe	 Micas [6]
C01B 33/44	4-Punkt Untergruppe	. . . Products obtained from layered base-exchange silicates by ion-exchange with organic compounds such as ammonium, phosphonium or sulfonium compounds or by intercalation of organic compounds, e.g. organoclay material [6]
C01B 33/46	3-Punkt Untergruppe	. . . Amorphous silicates, e.g. so-called "amorphous zeolites" (crystalline zeolites C01B 39/00) [6]
C01B 35/00	Hauptgruppe	Boron; Compounds thereof (monoborane, diborane, metal borohydrides or addition complexes thereof C01B 6/00; perborates C01B 15/12; binary compounds with nitrogen C01B 21/06; phosphides C01B 25/08; carbides C01B 31/36; alloys containing boron C22) [2]
C01B 35/02	1-Punkt Untergruppe	. Boron; Borides [2]
C01B 35/04	2-Punkt Untergruppe	. . Metal borides [2]
C01B 35/06	1-Punkt Untergruppe	. Boron halogen compounds [2]
C01B 35/08	1-Punkt Untergruppe	. Compounds containing boron and nitrogen, phosphorus, oxygen, sulfur, selenium or tellurium [2]
C01B 35/10	2-Punkt Untergruppe	. . Compounds containing boron and oxygen (C01B 35/06 takes precedence) [2]
C01B 35/12	3-Punkt Untergruppe	. . . Borates [2]
C01B 35/14	2-Punkt Untergruppe	. . Compounds containing boron and nitrogen, phosphorus, sulfur, selenium or tellurium [2]
C01B 35/16	1-Punkt Untergruppe	. Compounds containing direct bonding between two boron atoms, e.g. Cl ₂ B—BCl ₂ [2]
C01B 35/18	1-Punkt Untergruppe	. Compounds containing three or more boron atoms, e.g. NaB ₃ H ₈ , MgB ₁₀ Br ₁₀ (borazoles C01B 35/14) [2]
		<u>Compounds characterised primarily by their physical or chemical properties, rather than by their chemical constitution [6]</u>
C01B 37/00	Hauptgruppe	Compounds having molecular sieve properties but not having base-exchange properties [6]

Symbol	Typ	Titel
C01B 37/02	1-Punkt Untergruppe	. Crystalline silica-polymorphs, e.g. silicalites [6]
C01B 37/04	1-Punkt Untergruppe	. Aluminophosphates (APO compounds) [6]
C01B 37/06	1-Punkt Untergruppe	. Aluminophosphates containing other elements, e.g. metals, boron [6]
C01B 37/08	2-Punkt Untergruppe	. . Silicoaluminophosphates (SAPO compounds) [6]
C01B 39/00	Hauptgruppe	Compounds having molecular sieve and base-exchange properties, e.g. crystalline zeolites; Their preparation; After-treatment, e.g. ion-exchange or dealumination (treatment to modify the sorption properties, e.g. shaping using a binder, B01J 20/10; treatment to modify the catalytic properties, e.g. combination of treatments to make the zeolites appropriate to their use as a catalyst, B01J 29/04; treatment to improve the ion-exchange properties B01J 39/14; regeneration or reactivation of ion-exchange properties B01J 49/00; preparation of stabilised suspensions used in detergents C11D 3/12) [6]
C01B 39/02	1-Punkt Untergruppe	. Crystalline aluminosilicate zeolites; Isomorphous compounds thereof; Direct preparation thereof; Preparation thereof starting from a reaction mixture containing a crystalline zeolite of another type, or from preformed reactants: After-treatment thereof [6]
C01B 39/04	2-Punkt Untergruppe	. . using at least one organic template directing agent, e.g. an ionic quaternary ammonium compound or an aminated compound [6]
C01B 39/06	2-Punkt Untergruppe	. . Preparation of isomorphous zeolites characterised by measures to replace the aluminium or silicon atoms in the lattice framework by atoms of other elements [6]
C01B 39/08	3-Punkt Untergruppe	. . . the aluminium atoms being wholly replaced [6]
C01B 39/10	3-Punkt Untergruppe	. . . the replacing atoms being phosphorus atoms [6]
C01B 39/12	3-Punkt Untergruppe	. . . the replacing atoms being boron atoms [6]
C01B 39/14	2-Punkt Untergruppe	. . Type A, as exemplified by patent documents US A 2,882,243 and GB A 1,035,644 [6]
C01B 39/16	3-Punkt Untergruppe	. . . from aqueous solutions of an alkali metal aluminate and an alkali metal silicate excluding any other source of alumina or silica but seeds [6]
C01B 39/18	3-Punkt Untergruppe	. . . from a reaction mixture containing at least one aluminium silicate or aluminosilicate of a clay type, e.g. kaolin or metakaolin or its exotherm modification or allophane [6]
C01B 39/20	2-Punkt Untergruppe	. . Faujasite type, e.g. type X or Y, as exemplified by patent documents US A 2,882,244 and US A 3,130,007, respectively [6]
C01B 39/22	3-Punkt Untergruppe	. . . Type X [6]
C01B 39/24	3-Punkt Untergruppe	. . . Type Y [6]
C01B 39/26	2-Punkt Untergruppe	. . Mordenite type [6]
C01B 39/28	2-Punkt Untergruppe	. . Phillipsite or harmotome type, e.g. type B, as exemplified by patent document US A 3,008,803 [6]
C01B 39/30	2-Punkt Untergruppe	. . Erionite or offretite type, e.g. zeolite T, as exemplified by patent document US A 2,950,952 [6]
C01B 39/32	2-Punkt Untergruppe	. . Type L, as exemplified by patent document US A 3,216,789 [6]
C01B 39/34	2-Punkt Untergruppe	. . Type ZSM-4, as exemplified by patent document GB A 1,117,568 or type ω , as exemplified by patent document GB A 1,178,186 [6]
C01B 39/36	2-Punkt Untergruppe	. . Pentasil type, e.g. types ZSM-5, ZSM-8 or ZSM-11, as exemplified by patent documents US A 3,702,886, GB A 1,334,243 and US A 3,709,979, respectively [6]
C01B 39/38	3-Punkt Untergruppe	. . . Type ZSM-5 [6]
C01B 39/40	4-Punkt Untergruppe	 using at least one organic template directing agent [6]

Symbol	Type	Titel
C01B 39/42	2-Punkt Untergruppe	. . Type ZSM-12, as exemplified by patent document US A 3,832,449 [6]
C01B 39/44	2-Punkt Untergruppe	. . Ferrierite type, e.g. types ZSM-21, ZSM-35 or ZSM-38, as exemplified by patent documents US A 4,046,859, US A 4,016,245 and US A 4,046,859, respectively [6]
C01B 39/46	2-Punkt Untergruppe	. . Other types characterised by their X-ray diffraction pattern and their defined composition [6]
C01B 39/48	3-Punkt Untergruppe	. . . using at least one organic template directing agent [6]
C01B 39/50	1-Punkt Untergruppe	. Zeolites wherein inorganic bases or salts occlude channels in the lattice framework, e.g. sodalite, cancrinite, nosean, hauynite [6]
C01B 39/52	2-Punkt Untergruppe	. . Sodalites [6]
C01B 39/54	1-Punkt Untergruppe	. Phosphates, e.g. APO or SAPO compounds [6]