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LIST OF MINING PRODUCTS

Prepared by the
Economic Commission for Latin America

LIST OF MINING PRODUCTS

1. The United Nations Statistical Commission, at its thirteenth session, adopted, inter alia, the following resolution:

"The Statistical Commission

Requests the Secretary-General:

(1) To prepare, in consultation with the regional commissions, international recommendations for the establishment of a basic list of selected individual commodities for which industrial production data should be compiled..." (resolution 6 (XIII)).

2. In 1962 the Statistical Division of ECLA started work on some preparatory studies with a view to establishing a list of manufactured products which, after revision by an ad hoc working group, was issued as an ECLA document entitled Proyecto de Lista Uniforme de Productos Manufacturados; ^{1/} the products considered as essential for a "minimum" list are presented in another Seminar document. ^{2/}

3. In order to extend the coverage of the list of products it was considered desirable to submit the present document for the consideration of participants in the Latin American Seminar on Industrial Statistics. It contains a list of mineral products taken from ISIC ^{3/} groups 110 to 199, and classified in accordance with the SITC ^{4/} items to provide a basis of comparison for production and foreign trade data.

4. In addition to the generic name of each mineral product, the names of the main primary mineral products have also been given together with an indication of their chemical composition, so that the the list can be used for consultation or reference purposes in the national statistical offices during the compilation and classification of data on mining output.

^{1/} E/CN.12/648/Rev.1, 10 December 1963.

^{2/} See ST/ECLA/Conf.24/L.5.

^{3/} International Standard Industrial Classification of All Economic Activities, (Statistical Papers, Series M, No. 4, Rev.1).

^{4/} Standard International Trade Classification, Revised (Statistical Papers, Series M, No. 34).

5. It is not intended to suggest that production data be collected for primary mineral products, still less for metal ores, as this kind of information, while useful at the level of the mining enterprise, is of no importance for the published statistics. As explained in the previous paragraph, they are simply intended to serve as a guide in acquiring a better knowledge of the origin and content of mineral products. With this end in view, wherever appropriate, besides generic names (e.g., iron ore) have been supplemented by the names of the major primary mineral products (e.g., hematite, siderite) with and some indication of their chemical composition.

6. It is hoped that during the Seminar discussions the participants will indicate whether the names and definitions of the mineral products are correct, whether they are produced on a commercial scale in their own countries and whether any important products have been omitted from the list. These data will be helpful for preparing a revised version of the list to be sent to the national statistical offices for their consideration and comments, and eventually, for use in mining output inquiries.

/Group 110.

Group 110. COAL MINING

Numerical list of products obtained from mines engaged mainly in the extraction of anthracite and of soft coals such as bituminous, sub-bituminous and lignite. Also included are prospecting for coal and preparing sites for the extraction of coal.

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	321.4	Coal		Tons
	321.4		Anthracite	
	321.4		Coals	
	321.6		Lignite	

/Group 121.

Group 121. IRON ORE MINING

Numerical list of products obtained from mines engaged in the extraction of iron ore. Also included are prospecting and the preparation of sites for the extraction and beneficiating of the ore.

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	281.3	Iron		Tons
	281.3		Hematite (iron oxide)	
	281.3		Limonite (hydrated iron oxide)	
	281.3		Magnetite (magnetic iron oxide)	
	281.3		Siderite (natural ferrous carbonate)	
	281.4		Iron pyrites, roasted <u>1/</u> (iron sulphide)	

1/ Produced in iron mining.

Group 122. METAL MINING, EXCEPT IRON ORE MINING

Numerical list of products obtained from mines engaged in the extraction of metalliferrous ores, except iron. Also included are prospecting and the preparation of sites for the extraction and beneficiating of these ores.

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	283.1(1)	Copper		Tons
	283.1(1)		Atacamite (natural copper hydroxy-chloride)	
	283.1(1)		Azurite (basic copper carbonate)	
	283.1(1)		Bornite (sulphide of iron and copper)	
	283.1(1)		Brochantite (basic copper sulphate)	
	283.1(1)		Bornonite (sulphanti- monide of copper and lead)	
	283.1(1)		Chalcocite (copper sulphide)	
	283.1(1)		Chalcopyrite (sulphide of copper and iron)	
	283.1(1)		Covellite (sulphide of copper)	

Group 122. (Cont. 1)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	283.1(1)		Chrysocolla (hydrous copper silicate)	
	283.1(1)		Cuprite (copper oxide)	
	283.1(1)		Dioptase (copper silicate)	
	283.1(1)		Malachite (basic copper carbonate)	
	283.1(1)		Tenorite (copper oxide)	
2	283.2(1)	Nickel		Tons
	283.2(1)		Garnierite (hydrous nickel-magnesium silicate)	
	283.2(1)		Niccolite (arsenical nickel)	
	283.2(1)		Millerite (sulphide of nickel)	
	283.2(1)		Pentlandite (sulphide of nickel and iron)	
	283.2(1)		Pyrrhotite (nickel-bearing iron sulphide)	

Group 122. (Cont. 2)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
3	283.3	Bauxite		Tons
	283.3		(aluminium hydroxide)	
4	283.4	Lead		Tons
	283.4		Anglesite (lead sulphate)	
	283.4		Cerussite (lead carbonate)	
	283.4		Galena (lead sulphide)	
	283.4		Pyromorphite (lead chlorophosphate)	
5	283.5	Zinc		Tons
	283.5		Blende (zinc sulphide)	
	283.5		Calamine or Hemimorphite (zinc hydrosilicate)	
	283.5		Smithsonite (zinc carbonate)	
	283.5		Zincite (zinc oxide)	
6	283.6	Tin		Tons
	283.6		Cassiterite (tin oxide)	
	283.6		Stannite (sulphostannate of copper and iron)	

Group 122. (Cont. 3)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
7	283.7	Manganese		Tons
	283.7		Braunite (sesquioxide of manganese)	
	283.7		Dialogite (carbonate of manganese)	
	283.7		Hausmanite (natural manganese oxide)	
	283.7		Pyrolusite (manganese dioxide)	
	283.7		Psilomelane (hydrated manganese dioxide)	
8	283.9(1)	Chromium		Tons
	283.9(1)		Chromite (oxide of ferrous iron and chromium)	
9	283.9(2)	Tungsten (Wolfram)		Tons
	283.9(2)		Ferberite (tungstate of iron)	
	283.9(2)		Hubnerite (tungstate of manganese)	
	283.9(2)		Scheelite (tungstate of calcium)	
	283.9(2)		Wolframite (tungstate of iron and manganese)	

Group 122. (Cont. 4)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
10	283.9(3)	Molybdenum		Tons
	283.9(3)		Molybdenite (molybdenum sulphide)	
	283.9(3)		Wulfenite (molybdenate of lead)	
11	283.9(3)	Tantalum		Tons
	283.9(3)		Tantalite (tantalate of ferrous iron and manganese)	
12	283.9(3)	Titanium		Tons
	283.9(3)		Anatase (titanium dioxide)	
	283.9(3)		Brookite (titanium oxide)	
	283.9(3)		Ilmenite (titanate of iron)	
	283.9(3)		Rutile (titanium dioxide)	
13	283.9(3)	Vanadium		Tons
	283.9(3)		Descloizite (rare compound of lead, zinc and vanadium)	
	283.9(3)		Patronite (sulphide of vanadium)	
	283.9(3)		Roscoelite (vanadosilicate of aluminium and magnesium)	

Group 122, (Cont. 5)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	283.9(3)		Vanadinite (chlorovanadate of lead)	
14	283.9(3)	Zirconium		Tons
	283.9(3)		Baddeleyite (zirconium oxide)	
	283.9(3)		Zircon and zircon sand (zirconium silicates)	
15	283.9(9)	Antimony		Tons
	283.9(9)		Cervantite (oxide of antimony)	
	283.9(9)		Stibnite or antimonite (sulphide of antimony)	
	283.9(9)		Kermesite (oxysulphide of antimony)	
	283.9(9)		Senarmonite (antimony trioxide)	
	283.9(9)		Valentinite (antimony trioxide)	
16	283.9(9)	Beryllium		Tons
	283.9(9)		Beryl (silicate of beryllium and aluminium)	
17	283.9(9)	Bismuth		Tons
	283.9(9)		Bismuthinite (sulphide of bismuth)	

Group 122. (Cont. 6)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	283.9(9)		Bismutite (carbonate of bismuth)	
	283.9(9)		Bismuth ochre or bismite (trioxide of bismuth)	
18	283.9(9)	Cobalt		Tons
	283.9(9)		Cobaltite (sulpharsenide of cobalt)	
	283.9(9)		Smaltite (cobalt-nickel arsenide)	
	283.9(9)		Heteroginite (hydrated oxide of cobalt)	
	283.9(9)		Linnaeite (cobalt and nickel sulphide)	
19	283.9(9)	Niobium		Tons
	283.9(9)		Columbite (niobate of iron and magnesium)	
20	283.9(9)	Mercury		Tons
	283.9(9)		Cinnabar (sulphide of mercury)	
21	285.0(1)	Silver		Kilogrammes
	285.0(1)		Argentite (silver sulphide)	
	285.0(1)		Stephanite (silver sulphantimonite)	

Group 122. (Cont. 7)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	285.0(1)		Pyrargyrite (silver sulphantimonite)	
	285.0(1)		Polybasite (sulphantimonide of silver)	
	285.0(1)		Proustite (sulpharsenide of silver)	
	285.0(1)		Cerargyrite (chloride of silver)	
22	285.0(1)	Platinum		Kilogrammes
	285.0(1)		Sperrylite (platinum diarsenide).	
23	286.0	Thorium		Tons
	286.0		Monazite (thorium phosphate and rare earths)	
	286.0		Thorite (thorium silicate)	
24	286.0	Uranium		Tons
	286.0		Autunite or uranite (hydrated phosphate of uranium and calcium)	
	286.0		Carnotite (hydrated vanadate of uranium and potassium)	

Group 122. (Concl.)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	286.0		Pitchblende (oxide of uranium)	
	286.0		Torbernite (hydrated phosphate of uranium and copper)	
	286.0		Uraninite (uranium oxide)	
	286.0		Uranothorianite (oxide of uranium and thorium)	
25	286.0	Gold		Kilogrammes
	286.0		Calaverite (gold telluride)	
	286.0		Sylvanite (gold and silver telluride)	

/Group 130.

Group 130. CRUDE PETROLEUM AND NATURAL GAS

Numerical list of products obtained from the operation of oil wells and natural gas wells, including prospecting and drilling, and oil shale or bituminous sand operations, including extraction of crude oil. The independent operation of pipe lines is classified in group 719 (transportation not elsewhere classified).

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	331.0(1)	Crude petroleum		m ³
2	341.1	Natural gas (at the well)		m ³

/Group 140.

Group 140. STONE QUARRYING, CLAY AND SAND PITS

Numerical list of products obtained from the extraction from the earth of building and monumental stone (including slate); ceramic, refractory and other clay and all sand and gravel. Establishments primarily engaged in shaping stone or pulverizing, grinding, etc., stone, gravel, clay or sand are classified in group 339 (manufacture of non-metallic mineral products, not elsewhere classified).

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	273.1(1)	Slate		Tons
2	273.1(2)	Marble (hardened limestone, homogenous, fine grain)		Tons
3	275.2(2)	Kieselguhr		Tons
4	276.2(1)	Bentonite (clay for oil wells)		Tons
5	276.2(1)	Kaolin (hydrated alumino-silicate)		Tons
6	276.2(3)	Dolomite (natural carbonate of calcium and magnesium)		Tons
7	276.2(4)	Magnesite (natural magnesium carbonate)		Tons
8	276.5(4)	Feldspar (complex compounds of alumino-silicates with alkaline metal or alkaline earth)		Tons

Group 140. (Concl.)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
9	276.9(1)	Chalk (natural calcium carbonate)		Tons
10	276.9(9)	Pozzolana		Tons

/Group 191.

Group 191. SALT MINING AND QUARRYING

Numerical list of products obtained in the extraction and quarrying of salt including evaporating as in salt pans, crushing, screening and refining. The refinement of salt for edible purposes in establishments not engaged in extracting or quarrying salt is classified in group 209 (manufacture of miscellaneous food preparations).

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	276.3	Salt (sodium chloride)		Tons
	276.3		Salt from salt pans	
	276.3		Rock salt or Halite	
	276.3		Sea salt	

/Group 192.

Group 192. CHEMICAL AND FERTILIZER MINERAL MINING

Numerical list of products obtained from the mining and quarrying of phosphate and nitrate minerals, fluorspar, sulphur ores and natural sulphur, potash, sodium and borate minerals, borytes, pyrites, arsenic, strontium and lithium minerals and mineral pigments. Guano gathering is included in this group.

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	271.1	Guano		Tons
2	271.2	Saltpetre		Tons
	271.2		Caliche (natural sodium nitrate)	
3	271.3	Phosphates		Tons
	271.3		Apatite (natural calcium phosphate usually containing fluorine or sometimes chlorine)	
	271.3		Chalk, phosphatic (chalks mixed with calcium phosphate)	
	271.3		Aluminium calcium phosphates, natural	
	271.3		Calcium phosphates, natural	
	271.3		Phosphorites (fibrous concretionary variety of apatite)	

Group 192. (Cont. 1)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
4	271.4	Potassium salts		Tons
	271.4		Kainite (hydrated double salt of magnesium and potassium)	
	271.4		Carnallite (hydrated double chloride of potassium and magnesium)	
	271.4		Saltpetre, potassic	
	271.4		Sylvinite, (mixtures of sylvite, halite and kieserite)	
	271.4		Sylvite (potassium chloride)	
5	274.1	Sulphur		Tons
	274.1		Native sulphur	
	274.2	Sulphur		Tons
	274.2		Iron pyrites (unroasted)	
6	276.5(3)	Cryolite (sodium aluminium fluorides)		Tons
	276.5(3)	Chiolite		
7	276.5(4)	Fluorspar (Fluorite) (calcium fluoride)		Tons

Group 192. (Cont. 2)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
8	276.9(2)	Ochres	(clays containing oxides and hydroxides of iron)	Tons
9	276.9(3)	Natural salts of Barium		Tons
	276.9(3)		Barytes (barium sulphate)	
	276.9(3)		Witherite or Barolite (barium carbonate)	
10	276.9(6)	Arsenic		Tons
	276.9(6)		Loellingite (iron arsenide)	
	276.9(6)		Mispickel (sulphur arsenide of iron)	
	276.9(6)		Orpiment (arsenic trisulphide)	
	276.9(6)		Realgar (arsenic disulphide)	
11	276.9(7)	Natural borates		Tons
	276.9(7)		Boracite (chloride and borate of magnesium)	

/Group 192. (Concl.)

Group 192. (Concl.)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
	276.9(7)		Kernite and Tincal (sodium borate)	
	276.9(7)		Pandermite and Priceite (hydrated calcium borate)	
12	276.9(9)	Alunite (alum stone)		Tons
13	276.9(9)	Strontium		Tons
	276.9(9)		Celestite (strontium sulphate)	
	276.9(9)		Strontianite (strontium carbonate)	
14	276.9(9)	Lithium		Tons
	276.9(9)		Amblygonite (fluophosphate of aluminium and lithium)	
	276.9(9)		Spodumene (silicate of aluminium and lithium)	
	276.9(9)		Lepidolite (fluosilicate of potassium, lithium and aluminium)	

Group 199. NON-METALLIC MINING AND QUARRYING NOT ELSEWHERE CLASSIFIED

Numerical list of products obtained from the mining and quarrying of such materials as gypsum, asbestos, mica, quartz, natural abrasives other than sand, graphite, talc and soapstone, natural gem stones, asphalt, bitumen and all other non-metallic minerals not elsewhere classified. Peat cutting and digging is included in this group. Also included is prospecting for non-metallic minerals except coal and petroleum and for minerals in general. Establishments primarily engaged in milling, grinding, pulverizing, etc., these minerals, are classified in group 339 (manufacture of non-metallic mineral products, not elsewhere classified).

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
1	273.2(1)	Gypsum: (crystalline hydrated calcium sulphate)		Tons
	273.2(1)		Anhydrite (anhydrous calcium sulphate)	
2	275.1	Diamonds, industrial, uncut: (crystallized carbon)		Tons
3	275.2(3)	Corundum, natural: (aluminium oxide)		Tons
4	275.2(3)	Emery (alumina mixed with ferric oxide)		Tons

/Group 199. (Concl.)

Group 199. (Concl.)

NUMBER	SITC	DESCRIPTION		UNIT OF MEASUREMENT
		PRODUCT	MINERALS	
5	275.2(3)	Pumice (porous volvanic rock)		Tons
6	276.1	Asphalt and Bitumen, natural (hydrocarbons admixed with inert mineral matter)		Tons
7	276.2(2)	Graphite, natural		Tons
	276.2(2)		Graphite (natural crystalline form of carbon)	
	276.2(2)		Black lead	

1000

1000

1000

1000

1000

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