



C18

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 U.S. GEOLOGICAL SURVEY  
 986 NATIONAL CENTER  
 RESTON, VIRGINIA 20192

INDIVIDUAL COMPANY  
 DATA - PROPRIETARY

Unless authorization is granted in the section above the signature, the data furnished in this report will be treated in confidence by the Department of the Interior, except that they may be disclosed to Federal defense agencies, or to the Congress upon official request for appropriate purposes. Unless objection is made in writing to the USGS, the information furnished in this report may be disclosed to the respondent's State Geological Survey (or similar State Agency) if the State has appropriate safeguards to prevent disclosing company proprietary data.

**COBALT**

\_\_\_\_\_  
 (Please correct if name or address has changed.)

**FACSIMILE NUMBER**  
**1-800-543-0661**

Public voluntary reporting burden for this collection of information is estimated to average 1 HOUR per response. A Federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. Comments regarding this collection of information should be directed to: U.S. Geological Survey, Statistics and Information Systems Section, 988 National Center, Reston, VA 20192. **Please do not mail survey forms to this address.**

Collection of nonfuel minerals information is authorized by Public Law 96-479 and the Defense Production Act. This information is used to support executive policy decisions pertaining to emergency preparedness, national defense, and analyses for minerals legislation and industrial trends. The USGS relies on your voluntary and timely response to assure that its information is complete and accurate. If you have any questions concerning completion of this form, please contact the Mineral Commodities Data Unit, U.S. Geological Survey, 985 National Center, Reston, VA 20192, Telephone (703) 648-7960.

**Location of plant:** City or town \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

**SECTION 1. Stocks, purchases, production, and disposition of cobalt forms (include raw materials), cobalt scrap, and cobalt ore.**

Forms (1)	Code	Report basis (2)	Weight unit (3)	Physical inventory adjustment only (4)	Beginning stocks (5)	Purchases and receipts (6)	Production (7)	DISPOSITION		Ending stocks (10)
								Consumption to make other forms listed in COLUMN (1) (8)	Sales, transfers, or consumption directly to make end use products listed in SECTION (2) (9)	
Commercially pure unwrought cobalt metal.....	201	CONTAINED WEIGHT (2)	POUNDS (2)							
Oxide.....	202									
Hydroxide (hydrate).....	203									
Organic salts and compounds.....	204									
Inorganic salts and compounds.....	205									
Cobalt scrap.....	206									
Ore, matte, or concentrate.....	207									

**SECTION 2. Sales, transfers, or consumption of cobalt forms and cobalt scrap, by end use.**

Intended end use (1)	Code	QUANTITY SOLD, TRANSFERRED, OR CONSUMED (pounds of contained cobalt)					
		Commercially pure unwrought cobalt metal (2)	Oxide (3)	Hydroxide (hydrate) (4)	Organic salts and compounds (5)	Inorganic salts and compounds (6)	Cobalt scrap (7)
Drier for paints and related products.....	301						
Catalysts.....	302						
Electroplating.....	303						
Pigments.....	304						
Ground coat frit.....	305						
Glass decolorizer.....	306						
Feed or nutritive additive.....	307						
Rubber additive.....	308						
Other uses <i>(please specify)</i>	309						
_____							
_____							
_____							
<b>TOTAL.....</b>	<b>399</b>						

**Remarks:**

Name of person to be contacted regarding this report			Tel. area code		No.		Ext.				
Address		No.		Street		City		State		ZIP Code	
May tabulations be published which could indirectly reveal the data reported above? <input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No											
Signature						Title			Date		

**C18**

**GENERAL INSTRUCTIONS**

Please return the form in the enclosed envelope or fax to the toll-free number on the first page of the form **BY THE 15TH OF THE MONTH** following the reporting period. Complete a separate form for each establishment. If you do not have exact data, please enter your best estimates. Use zero (0) when appropriate. Do not report decimals or fractions; round to the nearest whole number. Please do not make entries in shaded areas. Use the space for "Remarks" to provide any specific information that will help us in the use or interpretation of the data. Additional forms are available upon request.

If you have any questions concerning completion of this form, please contact the Mineral Commodities Data Unit, U.S. Geological Survey, 985 National Center, Reston, VA 20192, Telephone (703) 648-7960.

**SPECIFIC INSTRUCTIONS**

**SECTION 1. Receipts, purchases, production and disposition of cobalt forms.**

- Column 1. Forms.** (include raw materials)  
*Commercially pure unwrought cobalt metal.*  
Cobalt metal containing more than 99% Co as in powder, briquettes, rondelles, electrolytic (broken cathodes), cones, lumps, granules, shot or pellets.
- Cobalt oxide.*  
Include cobaltous, cobaltic and cobaltosic oxides. If a precise content is not known, apply 74% (or best reasonable estimate) to gross weight to obtain cobalt content.
- Hydroxide (hydrate).*  
If a precise content is not known, apply 63% (or best reasonable estimate) to gross weight to obtain cobalt content.
- Organic salts and compounds.*  
Many of these compounds are referred to as driers. If a precise content is not known, apply 6% (or best reasonable estimate) to the gross weight to obtain the cobalt content.
- Inorganic salts and compounds.*  
These include cobalt carbonate, chloride, nitrate, sulfate, phosphate, and fluoride. If a precise content is not known, apply 30% (or best reasonable estimate) to the gross weight to obtain cobalt content.
- Cobalt scrap.*  
Include generated (revert) scrap, such as spent catalysts, as well as purchased scrap. Make best reasonable estimate to obtain cobalt content.
- Ore, matte, or concentrate.*  
Include ore, matte, and concentrate to be processed for cobalt. Make best reasonable estimate to obtain cobalt content.

- Columns 2 - 3. Report basis and weight unit.**  
Report all quantities as pounds of contained cobalt, not gross weight of commercial form. Estimate cobalt content if exact content is unknown.

- Column 4. Physical inventory adjustment only.**  
Report adjustments necessary to correct ending inventory shown for the preceding report period. If adjustment is significant, explain under Remarks. Show negative figures in parentheses.

- Column 5. Beginning stocks.**  
Report all cobalt forms (COLUMN 1) owned by the reporting establishment at the beginning of the report period. Include cobalt in process, on consignment to others, and, if owned by you, in transit to you within the United States. Exclude material sold but awaiting shipment, material transferred to other establishments of your company or to other parts of the reporting establishment, and material on consignment to you from others.

***Entries in COLUMN 5 plus or minus inventory adjustments (COLUMN 4) should equal ending stocks (COLUMN 10) on the preceding report.***

- Column 6. Purchases and receipts.**  
Report cobalt (COLUMN 1) purchased by the reporting establishment; include materials coming from other companies and those transferred from other establishments of your company. If purchased from foreign sources, include only the quantity which arrived in the United States during the report period.

## SPECIFIC INSTRUCTIONS *(continued)*

**Column 7. Production.**

Report the quantity of cobalt (COLUMN 1) produced in the reporting establishment during the report period.

**Column 8. Consumption to make other forms in COLUMN 1.**

Report the quantity of cobalt forms used to make other forms (COLUMN 1) at the reporting establishment during the report period.

**Column 9. Sales, transfers, or consumption directly to make end use products listed in SECTION 2.**

Enter the quantity of cobalt (COLUMN 1) sold during the report period by the reporting establishment. Include cobalt forms transferred to other establishments of your company or to other parts of the reporting establishment. In addition, report the quantity of cobalt forms consumed directly at the reporting establishment to make one or more of the end use products in SECTION 2. (Include cobalt forms used as end products listed in SECTION 2, such as catalysts or pigments, at the reporting establishment.)

**Column 10. Ending stocks.**

Report all cobalt (COLUMN 1) owned by the reporting establishment at the end of the report period. Include cobalt in process, on consignment to others, and, if owned by you, in transit to you within the United States. Exclude material sold but awaiting shipment, material transferred to other establishments of your company or to other parts of the reporting establishment, and material on consignment to you from others.

***For each line, the entry in COLUMN 10 should equal COLUMN 5 plus COLUMN 6 minus COLUMN 7 minus COLUMN 9.***

**SECTION 2. Sales, transfers, or consumption of cobalt forms, by end use.**

For each intended end use (COLUMN 1), report in the appropriate column the quantity sold, transferred or consumed to make one of the listed end uses. The total of each column should equal the total quantity of the corresponding form of cobalt reported as sold, transferred, or consumed in COLUMN 9 of SECTION 1.

***Drier for paints and related products.***

Report any compounds used to accelerate the rate of drying of paints, varnishes, inks, and other products.

***Catalysts.***

Include any cobalt compounds used in chemical processes or reactions as catalysts. Such processes may include hydrogenation (as used in desulfurization of crude oil), Fischer Tropsch synthesis, hydration, oxidation and reduction.

***Electroplating.***

Include any cobalt compound, such as cobaltous sulfamate, used in electroplating.

***Pigments.***

Include coloring agent compounds such as cobalt aluminate, stannate, and phosphate; any compounds used in dyes; and those used for coloring lacquers, enamels, and ceramics.

***Ground coat frit.***

Include any cobalt compounds, such as cobalt oxide, used to increase the adherence of enamel to metal surfaces.

***Glass decolorizer.***

Include any cobalt compound, such as cobalt oxide, used for this purpose.

***Feed or nutritive additive.***

Include any compounds added to feed, fertilizer, or drugs to prevent dietary deficiency.

***Rubber additive.***

Include any compounds used to promote the adherence of metal to rubber.

***Other uses.***

May include batteries, magnetic tapes, radioactive cobalt, moisture indicator, absorbent for ammonia, antiknock agent, or any other use.