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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

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**FORM SD  
Specialized Disclosure Report**

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**WEST PHARMACEUTICAL SERVICES, INC.**

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(Exact name of registrant as specified in its charter)

**Pennsylvania**  
(State or other jurisdiction  
of incorporation or organization)

**1-8036**  
(Commission File  
Number)

**23-1210010**  
(IRS Employer  
Identification No.)

**530 Herman O. West Drive, Exton, PA**  
(Address of principal executive offices)

**19341-0645**  
(Zip Code)

**William J. Federici, 610-594-2900**

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(Name and telephone number, including area code, of the person to contact in connection with  
this report.)

Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1 to December 31, 2017.

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## **Section 1 Conflict Minerals Disclosure**

### **Item 1.01 Conflict Minerals Disclosure and Report**

#### **Conflict Minerals Disclosure**

In accordance with Rule 13p-1 under the Securities Exchange Act of 1934, this Specialized Disclosure Report on Form SD of West Pharmaceutical Services, Inc. is for the period from January 1, 2017 to December 31, 2017. Unless the context indicates otherwise, “West,” “we,” “us,” and “our” refer to West Pharmaceutical Services, Inc. and its subsidiaries.

We evaluated our product lines and determined that, during 2017, we manufactured, or contracted to manufacture, products for which columbite-tantalite (coltan), cassiterite, gold, wolframite or their derivatives (tantalum, tin and tungsten) (“3TGs”) are necessary to their functionality or production (“Covered Products”). Accordingly, we conducted a reasonable country of origin inquiry (“RCOI”) reasonably designed to determine in good faith whether any of the 3TGs in the Covered Products originated in the Democratic Republic of the Congo or an adjoining country (the Republic of the Congo, the Central African Republic, South Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia or Angola), or were from recycled or scrap sources.

Information about our RCOI and the steps taken to effect due diligence on the source and chain of custody of any 3TGs in the Covered Products is included in our Conflict Minerals Report, which is included as an exhibit to this Form SD. In addition, our Conflict Minerals Report is publicly available through the Investors page of the company’s website, <http://investor.westpharma.com>. Information on our website does not constitute part of this document.

#### **Forward-Looking Statements**

This Specialized Disclosure Report on Form SD, including the Conflict Minerals Report filed as exhibit thereto, contains forward-looking statements that are based upon management’s expectations and beliefs concerning future events impacting West. Certain matters contained herein concerning the future, including, but not limited to, risk mitigation steps, constitute forward-looking statements and are based upon management’s expectations and beliefs. All forward-looking statements are, by their nature, subject to risks, uncertainties, and other factors. There can be no assurance that these future events will occur as anticipated. Forward-looking statements speak only as of the date they were made, and we undertake no obligation to publicly update them. For a description of certain factors that could cause our future results to differ materially from those expressed in any forward-looking statement, see Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017, entitled “Risk Factors.”

### **Item 1.02 Exhibit**

West has included its Conflict Minerals Report as Exhibit 1.01 to this Form SD.

## **Section 2 Exhibits**

### **Item 2.01 Exhibits**

Exhibit 1.01 Conflict Minerals Report as required by Items 1.01 and 1.02 of Form SD.

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**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

WEST PHARMACEUTICAL SERVICES, INC.

/s/ William J. Federici

William J. Federici

Senior Vice President and Chief Financial Officer

May 25, 2018

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**EXHIBIT INDEX**

<u>Exhibit No.</u>	<u>Description</u>
1.01	Conflict Minerals Report as required by Items 1.01 and 1.02 of Form SD.

**West Pharmaceutical Services, Inc.**  
**Conflict Minerals Report**  
**For the Year Ended December 31, 2017**

**Company Overview**

This Conflict Minerals Report (the “Report”) of West Pharmaceutical Services, Inc. (the “Company”) has been prepared pursuant to Rule 13p-1 (the “Rule”) and Form SD promulgated under the Securities Exchange Act of 1934 for the period from January 1, 2017 to December 31, 2017. Unless the context indicates otherwise, “West,” “we,” “us,” and “our” refer to West Pharmaceutical Services, Inc. and its subsidiaries.

West Pharmaceutical Services, Inc. is a manufacturer of technologically advanced, high-quality, integrated containment and delivery systems for injectable drugs and healthcare products. Our products include a variety of primary packaging, containment solutions, reconstitution and transfer systems, and drug delivery systems, as well as contract manufacturing and analytical lab services.

**Supply Chain**

In 2017, consistent with previous years, we determined that the only product for which West sourced columbite-tantalite (coltan), cassiterite, gold, wolframite or their derivatives (tantalum, tin and tungsten) (“3TGs”) that are necessary to its functionality or production (“Covered Products”) was our SmartDose® technology platform, which is designed for controlled, subcutaneous delivery of high volume and high viscosity drugs. Our SmartDose technology platform contains electronic circuitry in the form of a printed circuit board assembly (“PCBA”) and a motor. West uses a contract manufacturer to produce the PCBA and an outside supplier for the motor.

As a downstream company, West purchases the materials and components for our SmartDose technology platform from third parties. We do not have direct relationships with smelters or refiners that produce the 3TGs within our supply chain and do not control any mineral reserves. Thus, any 3TGs that are potentially present in any of our products would have originated solely from our purchases from third parties.

**Conflict Minerals Program**

West is committed to working within our global supply chain to help ensure compliance with the Rule. In 2017, we continued to develop our conflict minerals compliance program and follow the framework established by the Organization for Economic Cooperation and Development (“OECD”) as tailored for downstream companies.

Our compliance program endeavors to identify whether the 3TGs in our Covered Products originated in the Democratic Republic of the Congo or an adjoining country (the Republic of the Congo, the Central African Republic, South Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia or Angola) (“Covered Countries”), or whether any of the 3TGs in our Covered Products were from recycled or scrap sources.

In 2017, our Conflict Minerals Steering Committee, consisting of Procurement, Legal, Regulatory and Compliance, oversaw enhancements to our due diligence on the origination of the 3TGs in our SmartDose technology platform. We increased our efforts to educate our suppliers on our expectations related to conflict minerals through an enhanced distribution of our Business Partner Code of Conduct, which includes West’s position statement related to Conflict Minerals, and included language related to conflict minerals in new supply agreements and questionnaires. West’s Business Partner Code of Conduct is a public document available at <http://www.westpharma.com/about-west/corporate-responsibility>. Information on our website does not constitute part of this document. We will continue to work with suppliers at all levels of the supply chain to increase the quality of the data provided to us. Our conflict minerals compliance program is implemented by our procurement and regulatory groups, and senior management is informed periodically of the progress.

**Description of West’s Reasonable Country of Origin Inquiry**

Once we determined that the only product for which West sourced 3TGs that are necessary to its functionality or production was our SmartDose technology platform, we conducted a reasonable country of origin inquiry (“RCOI”) reasonably designed to determine in good faith whether any of the 3TGs in our SmartDose technology platform originated in the Covered Countries or were from recycled or scrap sources.

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In conducting our RCOI on our SmartDose technology platform, we first performed a supply chain survey of the direct suppliers of our SmartDose technology platform components to obtain information on the origin of 3TGs contained in the materials supplied to us. Depending on the sufficiency of the responses received from our suppliers, we also surveyed some of our suppliers' suppliers. We achieved a 100% response rate as a result of our survey efforts. Lastly, we evaluated the adequacy of the responses and continued to investigate whether any of the 3TGs in our SmartDose technology platform originated in the Covered Countries.

The supply chain survey was implemented and administered by our procurement group. The survey employed the template developed by the Electronic Industry Citizenship Coalition® and the Global e-Sustainability Initiative known as the Responsible Minerals Initiative ("RMI") Reporting Template (the "Survey"). The Survey requested general disclosures, the identification of any 3TGs contained in the supplier's products and the origin of those minerals. We have received information from 100% of the suppliers we surveyed, although not all of the information requested was provided.

### **Due Diligence Process**

Following our RCOI, we conducted a due diligence review of the source and chain of custody of the 3TGs contained in our Covered Products and the facility's Smelters or Refiners ("SORs") in which they were processed. Our due diligence measures were designed to conform in all material respects with the framework in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas ("OECD Guidance") and the related supplements for 3TGs.

As part of this due diligence, we implemented management systems to identify and reduce risk in our supply chain regarding conflict minerals. Our management systems include enhanced communication with our suppliers, improved tracking mechanisms and increased employee education. These systems are designed to ensure the supply chain survey reached all relevant suppliers and adequate responses were received. We evaluated the responses against criteria designed to identify those suppliers that warranted further investigation, including for example, untimely, inconsistent or incomplete responses, requests for confidentiality, missing or erroneous data, whether the supplier was a U.S. publicly-held company, the size of the supplier's business and the material supplied to us. As appropriate, we followed up directly with suppliers, and in some cases, the suppliers of our suppliers, whose answers required us to obtain additional information, and updated responses.

As a downstream purchaser of 3TGs, or components containing 3TGs, our diligence procedures can provide only reasonable, not absolute, assurance regarding the source and chain of custody of such materials. Our diligence processes are based on the necessity of seeking data from our direct suppliers and those suppliers seeking similar information within their supply chains to identify the original sources of 3TGs. We also rely, to a large extent, on information collected and provided by third parties. Such sources of information may yield inaccurate or incomplete information and may be subject to fraud.

### **Conclusion**

Our Covered Products are subject to the reporting obligations of the Rule. After conducting a good faith reasonable country of origin inquiry and due diligence, we have concluded that our Covered Products, that is our SmartDose technology platform, contain 3TGs that are necessary to their functionality or production, and based on the information provided to us by our suppliers related to a majority of possible smelters in our supply chain either (a) the sources of the 3TGs contained in our SmartDose technology platform are certified conformant by RMI through its Responsible Minerals Assurance Process ("RMAP") or are actively seeking conformance by RMAP, or (b) the 3TGs contained in our SmartDose technology platform are not sourced from the Covered Countries. The RMAP implements a risk-based audit program to verify that smelter and refiner efforts are demonstrating due diligence capable of producing responsibly sourced products. The audit program confirms that the smelter facility has participated in procedures that illustrate responsible purchasing and company management processes. Despite our efforts, we did not receive adequate responses from a small percentage of smelters to determine the country of origin (or recycled or scrap status) of all of the 3TGs in our supply chain. Accordingly, we are unable to determine the country of origin and the specific SORs with respect to all of the 3TGs in our Covered Products.

West surveyed 40 direct and indirect suppliers of the components of our SmartDose technology platform, of which we received 40 responses. The responses included identification of the smelters from which any 3TGs were sourced. Our suppliers identified 294 smelters as possible sources for the 3TGs contained in our Covered Products. West conducted due diligence on these smelters to determine whether they are conformant under the RMAP assessment protocols ("RMAP Conformant") or actively seeking conformance. Smelters are considered actively seeking conformance if they have committed to undergo the RMAP audit. West identified 247 of the 294 as RMAP conformant and an additional 7 that are actively seeking conformance.

West conducted additional due diligence on the remaining 40 smelters and determined that, although they are not certified by a third party, 16 have programs or policies and procedures on their websites and another 13 have email addresses. As an

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additional due diligence step, West sent requests to these email addresses for information related to each of these smelter's conflict minerals programs. The remaining 11 of the 40 have no information available.

Table 1 below presents, by mineral, the total number of SORs identified and the percentage that are RMAP conformant or are actively seeking RMAP conformance. See Appendix 1 for a list of these SORs by name. We note that the number of SORs that are certified as conformant or actively seeking conformance increased almost 10% over our 2016 report.

**Table 1. Smelters or Refiners RMAP conformant or are actively seeking RMAP conformance**

<b>Gold</b>	105 of 127 (82.7%)
<b>Tantalum</b>	38 of 41 (92.7%)
<b>Tin</b>	70 of 84 (83.3%)
<b>Tungsten</b>	41 of 42 (97.6%)
<b>Total</b>	254 of 294 (86.4%)

### **Risk Mitigation**

We have taken the following steps to further mitigate the risk that the 3TGs in our Covered Products could benefit armed groups in the Covered Countries:

- Enhanced our direct materials supplier screening program to require new suppliers and suppliers of new products or components to provide information regarding 3TGs. The Company also intends to provide additional background and educational information to suppliers where necessary to enhance their responses. Finally, the Company will augment disclosure clauses regarding 3TGs in new supply contracts and supplier contract renewals.
  - Continued the activities of our Conflict Minerals Steering Committee to: (i) ensure the management systems are adequate; (ii) review the RCOI and due diligence process; (iii) discuss what actions West should take to help mitigate risk; and (iv) report the status of West's Conflict Minerals program to senior management periodically.
  - Increased engagement with our direct suppliers to further enhance this process. This included educating suppliers on the importance of the RCOI process and our Company's expectations and further improving our direct supplier surveys and due diligence process. We enhanced communication with our suppliers by sending them the West Business Partner Code of Conduct, improved tracking mechanisms by developing a database to store supplier information and increased employee education. These efforts were designed to help ensure the supply chain survey reached all relevant suppliers and adequate responses were received. We evaluated the responses against criteria designed to identify those suppliers that warrant further investigation, including for example, untimely, inconsistent or incomplete responses, requests for confidentiality, missing or erroneous data, whether the supplier was a U.S. publicly-held company, the size of the supplier's business and the material supplied to us. As appropriate, we followed up directly with suppliers, and in some cases, the suppliers of our suppliers, whose answers required us to obtain additional information, and updated responses.
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## APPENDIX 1

### Smelters or Refiners RMAP conformant or are actively seeking RMAP conformance<sup>1</sup>

<u>MINERAL</u>	<u>SMEALTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Gold	Advanced Chemical Company	UNITED STATES OF AMERICA
Gold	Aida Chemical Industries Co., Ltd.	JAPAN
Gold	Al Etihad Gold LLC	UNITED ARAB EMIRATES
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN
Gold	AngloGold Ashanti Córrego do Sítio Mineração	BRAZIL
Gold	Argor-Heraeus S.A.	SWITZERLAND
Gold	Asahi Pretec Corp.	JAPAN
Gold	Asahi Refining Canada Ltd.	CANADA
Gold	Asahi Refining USA Inc.	UNITED STATES OF AMERICA
Gold	Asaka Riken Co., Ltd.	JAPAN
Gold	AU Traders and Refiners	SOUTH AFRICA
Gold	Aurubis AG	GERMANY
Gold	Bangalore Refinery*	INDIA
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES
Gold	Boliden AB	SWEDEN
Gold	C. Hafner GmbH + Co. KG	GERMANY
Gold	CCR Refinery - Glencore Canada Corporation	CANADA
Gold	Cendres + Métaux S.A.	SWITZERLAND
Gold	Chimet S.p.A.	ITALY
Gold	Daejin Indus Co., Ltd.	KOREA, REPUBLIC OF
Gold	DODUCO Contacts and Refining GmbH	GERMANY
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF
Gold	Eco-System Recycling Co., Ltd.	JAPAN
Gold	Emirates Gold DMCC	UNITED ARAB EMIRATES
Gold	Geib Refining Corporation	UNITED STATES OF AMERICA
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA
Gold	HeeSung Metal Ltd.	KOREA, REPUBLIC OF
Gold	Heimerle + Meule GmbH	GERMANY
Gold	Heraeus Metals Hong Kong Ltd.	CHINA
Gold	Heraeus Precious Metals GmbH & Co. KG	GERMANY
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA
Gold	Ishifuku Metal Industry Co., Ltd.	JAPAN
Gold	Istanbul Gold Refinery	TURKEY

<sup>1</sup>This list includes SORs that are RMAP Conformant or actively seeking RMAP conformance. SORs actively seeking conformance are designated with an asterisk (\*).

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Gold	Italpreziosi	ITALY
Gold	Japan Mint	JAPAN
Gold	Jiangxi Copper Co., Ltd.	CHINA
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	RUSSIAN FEDERATION
Gold	JSC Uralelectromed	RUSSIAN FEDERATION
Gold	JX Nippon Mining & Metals Co., Ltd.	JAPAN
Gold	Kazzinc	KAZAKHSTAN
Gold	Kennecott Utah Copper LLC	UNITED STATES OF AMERICA
Gold	KGHM Polska Miedz Spolka Akcyjna*	POLAND
Gold	Kojima Chemicals Co., Ltd.	JAPAN
Gold	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF
Gold	Kyrgyzaltyn JSC	KYRGYZSTAN
Gold	L'Orfebre S.A.*	ANDORRA
Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF
Gold	Marsam Metals	BRAZIL
Gold	Materion	UNITED STATES OF AMERICA
Gold	Matsuda Sangyo Co., Ltd.	JAPAN
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA
Gold	Metalor Technologies S.A.	SWITZERLAND
Gold	Metalor USA Refining Corporation	UNITED STATES OF AMERICA
Gold	Metalurgica Met-Mex Penoles S.A. De C.V.	MEXICO
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Gold	MMTC-PAMP India Pvt., Ltd.	INDIA
Gold	Modeltech Sdn Bhd*	MALAYSIA
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION
Gold	Nadir Metal Rafineri San. Ve Tic. A.Ş.	TURKEY
Gold	Nihon Material Co., Ltd.	JAPAN
Gold	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION
Gold	PAMP S.A.	SWITZERLAND
Gold	Planta Recuperadora de Metales SpA	CHILE
Gold	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA
Gold	PX Précinox SA	SWITZERLAND
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA
Gold	Remondis Argentia B.V.*	NETHERLANDS

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Gold	Republic Metals Corporation	UNITED STATES OF AMERICA
Gold	Royal Canadian Mint	CANADA
Gold	SAAMP	FRANCE
Gold	Safimet S.p.A	ITALY
Gold	SAFINA A.S.*	CZECH REPUBLIC
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF
Gold	SAXONIA Edelmetalle GmbH	GERMANY
Gold	Schone Edelmetaal B.V.	NETHERLANDS
Gold	SEMPSA Joyeria Plateria SA	SPAIN
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA
Gold	Singway Technology Co., Ltd.	TAIWAN, PROVINCE OF CHINA
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION
Gold	Solar Applied Materials Technology Corp.	TAIWAN, PROVINCE OF CHINA
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN
Gold	SungEel HiMetal Co., Ltd.	KOREA, REPUBLIC OF
Gold	T.C.A S.p.A	ITALY
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA
Gold	Tokuriki Honten Co., Ltd.	JAPAN
Gold	Torecom	KOREA, REPUBLIC OF
Gold	Umicore Brasil Ltda.	BRAZIL
Gold	Umicore Precious Metals Thailand	THAILAND
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM
Gold	United Precious Metal Refining, Inc.	UNITED STATES OF AMERICA
Gold	Valcambi S.A.	SWITZERLAND
Gold	Western Australian Mint (T/a The Perth Mint)	AUSTRALIA
Gold	WIELAND Edelmetalle GmbH	GERMANY
Gold	Yamakin Co., Ltd.	JAPAN
Gold	Yokohama Metal Co., Ltd.	JAPAN
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA
Tantalum	D Block Metals, LLC	UNITED STATES OF AMERICA
Tantalum	Exotech Inc.	UNITED STATES OF AMERICA
Tantalum	F&X Electro-Materials Ltd.	CHINA
Tantalum	FIR Metals & Resource Ltd.	CHINA
Tantalum	Global Advanced Metals Aizu	JAPAN
Tantalum	Global Advanced Metals Boyertown	UNITED STATES OF AMERICA
Tantalum	Guangdong Rising Rare Metals-EO Materials Ltd.	CHINA
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Tantalum	H.C. Starck Co., Ltd.	THAILAND
Tantalum	H.C. Starck Hermsdorf GmbH	GERMANY
Tantalum	H.C. Starck Inc.	UNITED STATES OF AMERICA
Tantalum	H.C. Starck Ltd.	JAPAN
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tantalum	H.C. Starck Tantalum and Niobium GmbH	GERMANY
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Jiangxi Tuohong New Raw Material	CHINA
Tantalum	JiuJiang JinXin Nonferrous Metals Co., Ltd.	CHINA
Tantalum	Jiujiang Nonferrous Metals Smelting Company Limited	CHINA
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	KEMET Blue Metals	MEXICO
Tantalum	KEMET Blue Powder	UNITED STATES OF AMERICA
Tantalum	LSM Brasil S.A.	BRAZIL
Tantalum	Metallurgical Products India Pvt., Ltd.	INDIA
Tantalum	Mineração Taboca S.A.	BRAZIL
Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA
Tantalum	NPM Silmet AS	ESTONIA
Tantalum	Power Resources Ltd.	MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF
Tantalum	QuantumClean	UNITED STATES OF AMERICA
Tantalum	Resind Indústria e Comércio Ltda.	BRAZIL
Tantalum	RFH Tantalum Smeltery Co., Ltd./Yanling Jincheng Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION
Tantalum	Taki Chemical Co., Ltd.	JAPAN
Tantalum	Telex Metals	UNITED STATES OF AMERICA
Tantalum	Ulba Metallurgical Plant JSC	KAZAKHSTAN
Tantalum	XinXing HaoRong Electronic Material Co., Ltd.	CHINA
Tantalum	Yichun Jin Yang Rare Metal Co., Ltd.	CHINA
Tin	Alpha	UNITED STATES OF AMERICA
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA
Tin	China Tin Group Co., Ltd.	CHINA
Tin	CV Ayi Jaya	INDONESIA
Tin	CV Dua Sekawan	INDONESIA
Tin	CV Gita Pesona	INDONESIA
Tin	CV Serumpun Sebalai	INDONESIA
Tin	CV Tiga Sekawan	INDONESIA
Tin	CV United Smelting	INDONESIA
Tin	CV Venus Inti Perkasa	INDONESIA
Tin	Dowa	JAPAN

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Tin	EM Vinto	BOLIVIA (PLURINATIONAL STATE OF)
Tin	Fenix Metals	POLAND
Tin	Gejiu Fengming Metallurgy Chemical Plant	CHINA
Tin	Gejiu Jinye Mineral Company	CHINA
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA
Tin	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CHINA
Tin	Guanyang Guida Nonferrous Metal Smelting Plant	CHINA
Tin	HuiChang Hill Tin Industry Co., Ltd.	CHINA
Tin	Huichang Jinshunda Tin Co., Ltd.	CHINA
Tin	Jiangxi Ketai Advanced Material Co., Ltd.	CHINA
Tin	Magnu's Minerais Metais e Ligas Ltda.	BRAZIL
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA
Tin	Melt Metais e Ligas S.A.	BRAZIL
Tin	Metallic Resources, Inc.	UNITED STATES OF AMERICA
Tin	Metallo Belgium N.V.	BELGIUM
Tin	Metallo Spain S.L.U.	SPAIN
Tin	Mineração Taboca S.A.	BRAZIL
Tin	Minsur	PERU
Tin	Mitsubishi Materials Corporation	JAPAN
Tin	Nankang Nanshan Tin Manufactory Co., Ltd.	CHINA
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND
Tin	O.M. Manufacturing Philippines, Inc.	PHILIPPINES
Tin	Operaciones Metalurgical S.A.	BOLIVIA (PLURINATIONAL STATE OF)
Tin	PT Aries Kencana Sejahtera	INDONESIA
Tin	PT Artha Cipta Langgeng	INDONESIA
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA
Tin	PT Babel Inti Perkasa	INDONESIA
Tin	PT Bangka Prima Tin	INDONESIA
Tin	PT Bangka Tin Industry	INDONESIA
Tin	PT Belitung Industri Sejahtera	INDONESIA
Tin	PT Bukit Timah	INDONESIA
Tin	PT DS Jaya Abadi	INDONESIA
Tin	PT Eunindo Usaha Mandiri	INDONESIA
Tin	PT Inti Stania Prima	INDONESIA
Tin	PT Karimun Mining	INDONESIA
Tin	PT Kijang Jaya Mandiri	INDONESIA
Tin	PT Lautan Harmonis Sejahtera	INDONESIA
Tin	PT Menara Cipta Mulia	INDONESIA
Tin	PT Mitra Stania Prima	INDONESIA
Tin	PT Panca Mega Persada	INDONESIA
Tin	PT Prima Timah Utama	INDONESIA

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Tin	PT Refined Bangka Tin	INDONESIA
Tin	PT Sariwiguna Binasentosa	INDONESIA
Tin	PT Stanindo Inti Perkasa	INDONESIA
Tin	PT Sukses Inti Makmur	INDONESIA
Tin	PT Sumber Jaya Indah	INDONESIA
Tin	PT Timah (Persero) Tbk Kundur	INDONESIA
Tin	PT Timah (Persero) Tbk Mentok	INDONESIA
Tin	PT Tinindo Inter Nusa	INDONESIA
Tin	PT Tommy Utama	INDONESIA
Tin	Resind Indústria e Comércio Ltda.	BRAZIL
Tin	Rui Da Hung	TAIWAN, PROVINCE OF CHINA
Tin	Soft Metais Ltda.	BRAZIL
Tin	Thailand Smelting & Refining Co Ltd	THAILAND
Tin	White Solder Metalurgia e Mineração Ltda.	BRAZIL
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA
Tin	Yunnan Tin Company Limited	CHINA
Tungsten	A.L.M.T. TUNGSTEN Corp.	JAPAN
Tungsten	ACL Metais Eireli	BRAZIL
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA
Tungsten	Fujian Jinxin Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.*	CHINA
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES OF AMERICA
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA
Tungsten	H.C. Starck Tungsten GmbH	GERMANY
Tungsten	Hunan Chenzhou Mining Co., Ltd.	CHINA
Tungsten	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji	CHINA
Tungsten	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Hydrometallurg, JSC	RUSSIAN FEDERATION
Tungsten	Japan New Metals Co., Ltd.	JAPAN
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA
Tungsten	Kennametal Fallon	UNITED STATES OF AMERICA

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<u>MINERAL</u>	<u>SMELTER OR REFINER NAME</u>	<u>COUNTRY LOCATION</u>
Tungsten	Kennametal Huntsville	UNITED STATES OF AMERICA
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA
Tungsten	Moliren Ltd.	RUSSIAN FEDERATION
Tungsten	Niagara Refining LLC	UNITED STATES OF AMERICA
Tungsten	Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC	VIET NAM
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES
Tungsten	South-East Nonferrous Metal Company Limited of Hengyang City	CHINA
Tungsten	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM
Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION
Tungsten	Vietnam Youngsun Tungsten Industry Co., Ltd.	VIET NAM
Tungsten	Wolfram Bergbau und Hutten AG	AUSTRIA
Tungsten	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA
Tungsten	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA
Tungsten	Xinhai Rendan Shaoguan Tungsten Co., Ltd.	CHINA