

Platinum-rhodium wire for sale spectrometer



Overview

Surepure Chemetals sells both platinum-rhodium and pure platinum conforming to the ASTM E1159 specification for Thermocouple Materials, Platinum-Rhodium Alloys, and Platinum.

Key Takeaways

Platinum-rhodium (Pt-Rh) wire is available in various compositions and diameters for high-temperature thermocouples and precision laboratory applications, including spectrometers.

Overview of Platinum-

Rhodium WirePlatinum-rhodium wire is a noble metal alloy combining platinum and rhodium, offering exceptional thermal stability, oxidation resistance, and mechanical strength at elevated temperatures. It is commonly used in thermocouples (Types R, S, and B), industrial furnaces, laboratory sensors, and spectrometer components where precise temperature measurement is critical. The wire is suitable for oxidizing and inert atmospheres, and short-term use in vacuum, but should not be used in reducing atmospheres or in contact with metallic/non-metallic vapors unless protected.

Common Compositions and Thermocouple Types



Type B: Platinum 70% / Rhodium 30% paired with Platinum 94% / Rhodium 6%, usable up to 1800°C (3272°F) continuously. Type R: Platinum 87% / Rhodium 13% paired with pure platinum, usable up to 1600°C (2912°F). Type S: Platinum 90% / Rhodium 10% paired with pure platinum, also up to 1600°C (2912°F).

These wires are available in custom diameters from 0.001 to 0.032 inches (0.

025 to 0.812 mm), and can be supplied in matched pairs to meet thermocouple accuracy standards.

Applications in Spectrometers

In spectrometer setups, Pt-Rh wire is often used for high-temperature sample holders, electrodes, or thermocouple sensors to ensure precise temperature control. Its resistance to oxidation and corrosion makes it ideal for long-term, high-precision measurements in analytical instruments, including atomic absorption spectrometers and high-temperature emission spectroscopy.

Suppliers and Customization

Several suppliers offer platinum-rhodium wire suitable for laboratory and industrial use: Surepure Chemetals: Offers Pt-Rh wire conforming to ASTM E1159, suitable for Type B, R, and S thermocouples. Princeton Powder: Provides Pt-Rh wire in Type S, R, and B, with customizable diameters and lengths for high-temperature applications. Heeger Metal: Supplies Pt-Rh wire in PtRh5, PtRh10, PtRh15, PtRh20, and PtRh30, with options for soft or semi-hardened wire, remelting, and diameter adjustment.

Stanford Advanced Materials (SAM): Offers high-quality Pt-Rh thermocouple wire with matched pairs and special limits-of-error options. These suppliers can provide customized wire lengths, diameters, and alloy compositions to meet specific spectrometer or laboratory requirements.

Key Considerations

Choose the thermocouple type based on the maximum operating temperature and environment. Ensure wire diameter matches the sensor or spectrometer design for accurate readings. For high-precision applications, request matched pairs and consider special limits-of-error wire.

Avoid direct exposure to reducing atmospheres or metallic vapors without protective tubes. Platinum-rhodium wire is a premium material for high-temperature, high-precision applications, making it ideal for thermocouples, spectrometer components, and laboratory sensors.

Article Content

Buy Platinum Rhodium Wire and Rod, Purity: 87 % Platinum, 13

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Platinum Rhodium Thermocouple Wire

Heeger Materials Inc., a professional supplier, and manufacturer of high-quality Platinum (Pt) products including Platinum Rhodium (PtRh) Thermocouple Wire

Platinum Rhodium Thermocouple Wire Supplier | Heeger Metal

Heeger Metal supplies platinum rhodium thermocouple wire in PtRh5, PtRh10, PtRh15, PtRh20, and PtRh30 or customized, with standard and custom sizes available.

Platinum Rhodium Wire - PG Metal Shop

Platinum Rhodium is used in thermocouples and as a catalyst. Applications. Platinum Rhodium Wire manufacturing high temperature sensors. Floor sensors for glass melting furnaces in the direct

TC0933 Platinum-Rhodium (Pt-Rh) Thermocouple Wire

Stanford Advanced Materials (SAM) is a trusted supplier of high quality Platinum-Rhodium thermocouple wires. We offer tantalum Pt-Rh thermocouple wires with

Buy Platinum/Rhodium Wire (Spooled) | Pt60/Rh40 Alloy

Explore Goodfellow's Platinum/Rhodium Spooled Wire (Pt60/Rh40) for high-temperature thermocouples needing stable and accurate measurements. Inquire now.

Buy Platinum Wire and Rod from Surepure Chemetals

Buy platinum wire and rod from Surepure Chemetals. Order online via credit card or PayPal. Or order by PO. Many items in stock. Quick shipping. Great service.

Platinum Rhodium thermocouple wire

High purity Platinum Rhodium thermocouple wire (Type S/R/B), with a composition of Platinum 10% Rhodium, Platinum 13% Rhodium, or Platinum 30% Rhodium, is

Platinum Wire | Pt Wire, Thermocouple & Chemistry Wire

Shop platinum wire, platinum alloy wire, and platinum wire electrodes. Ideal for chemistry, heating, and thermocouple applications. Transparent pricing and fast delivery.

Buy Platinum Wire and Rod, Purity: 80% Platinum, 20% Rhodium

Buy platinum wire and rod from Surepure Chemetals. Purity: 80% Platinum, 20% Rhodium. Order online via credit card or PayPal. Or order by PO. Many items in stock. Quick shipping. Great service.

Platinum-Rhodium Thermocouple Wire | Uninsulated

High resistance to oxidation and corrosion at high temperatures. High quality uninsulated platinum-rhodium thermocouple wire.

Type R Platinum Rhodium Thermocouple Wire

Type R Platinum Rhodium Thermocouple Wire is designed for precise high-temperature measurements (0°C to 1700°C). Composed of 13% Rhodium and

Platinum Wire for Sale – Thermocouple & Lab Pt Wires

Get high-quality platinum wire for chemistry and industrial use. Pt and platinum rhodium thermocouple wires, coated and pure. Check platinum wire price now!

Platinum/Rhodium Wire

Platinum/Rhodium Wire - Material Information The Platinum/Rhodium (Pt87/Rh13) alloy is a high-performance material engineered for extreme-temperature applications such as

Platinum 10 wt% Rhodium wire, 0.25mm (0.01in) dia, ISA Type S

Platinum rhodium wire is used as a catalyst in preparation of nitric acid and in rayon spinnerets. It is used as a device for measuring high temperatures. It serves as a catalyst in the oxidation of the

Rhodium Wire | Rh Wire for Sale

Rhodium (Rh) Wire is a high-purity, uniform wire with exceptional density, ideal for semiconductor manufacturing, CVD, PVD, ALD, and E-Beam evaporation processes. Heeger Materials is a

Buy Platinum Rhodium from Surepure Chemetals

Type S thermocouples are made up of Platinum 90% / Rhodium 10% wire paired with Pure Platinum wire, and can be used up to 1600°C (2912°F). Before 1990, Type S thermocouples were used as the

Platinum Rhodium Wire | High Purity 99%–99.9999% | CAS 11107-71

Platinum Rhodium Wire qualified commercial & research quantity preferred supplier. Buy at competitive price & lead time. In-stock for immediate delivery. Uses, properties & Safety Data Sheet.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

