

Technical Data Sheet

4530-A Alumina Dielectric Alumina Insulator for HTCC Applications Material # 1148191



Product Description

4530-A is a high-temperature insulator composition for use in oxygen sensors together with 42020-D (Material # 1432322) HTCC tape.

4530-A is formulated to be Lead free, Cadmium free and Phthalate* free. The term “free” means that Lead, Cadmium and Phthalate* have not been intentionally added to the product. However, trace amounts may be present.

*Phthalates listed in Annex XIV of REACH

An ESL-Electro Science Laboratory Legacy Product

Typical Formulation Properties

Viscosity: 90±25 Pa*s at 25.5°C±0.5°C, when measured using a Brookfield RVT viscometer with an #7 spindle @ 10 rpm.

Storage and Shelf Life: This product should be stored in tightly sealed containers at 20°C to 25°C, in a dry place away from direct sunlight. The shelf life of a factory sealed container is a minimum 6 months from date of shipment

when properly stored.

Typical Processing Recommendations

Thinning: This paste is formulated at the appropriate viscosity for the intended application; Ferro 480 (Material # 1148622) may be used to replace solvent loss.

Printing: 200 mesh stainless steel screen with a nominal emulsion thickness of 0.1 mil.

Leveling: 5 to 10 minutes at room temperature.

Drying: 10 to 15 minutes at 80°C with forced air flow and exhaust.

Firing: Optimum results are obtained by firing at a peak temperature between 1350°C – 1500°C for 1.5 hours.

Limitation of Warranty and Liability

Ferro believes that the information contained in this document is accurate at the time of its publication. Ferro makes no warranty with respect to the information contained in this document. The information in this document is not a product specification, either in whole or in part. Your use of the information contained in this document and your purchase and use of this Ferro product are at your sole discretion. Downstream users are responsible for determination of the suitability of this product and for testing in specific applications. Nothing in this document shall be construed as a license for use that infringes upon any property rights of any third party. Please refer to the Safety Data Sheet (SDS) for safe use, handling and disposal information. All sales by Ferro to you are subject to Ferro's Terms and Conditions of Sale, as amended from time to time and available at www.ferro.com. In the event this document conflicts with Ferro's Terms and Conditions of Sale, Ferro's Terms and Conditions of Sale shall control.

Copyright © 2016 Ferro Corporation