

PRODUCT BULLETIN

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**ALLIED
MINERAL**
PRODUCTS, INC.

DRI-VIBE® 434A

General Information

DRI-VIBE® 434A is an alumina refractory designed to be installed dry by mechanical vibration. DRI-VIBE 434A is recommended for use in the base and stools of coil annealing furnaces, as well as a hearth lining in reheat furnace applications. The low initial set temperature of DRI-VIBE 434A, combined with increased strength at higher temperatures, are improvements over conventional DRI-VIBES. The strength profile of DRI-VIBE 434A increases resistance to damage caused by thermal cycling, an important factor in furnaces where slag, sand, or scale fill thermal cracks.

DRI-VIBE 434A is totally dry. It can be rapidly heated to operating temperatures without fear of thermal shock or steam spalling, which are common problems associated with castable refractories. The absence of water, plus the unique grain-size distribution of DRI-VIBE® 434A, results in a denser refractory than a castable of comparable chemistry.

Another major feature of DRI-VIBE® 434A is that it can be readily patched by shaving, allowing new DRI-VIBE® refractory to be applied using procedures similar to those used for a new lining.

Technical Data

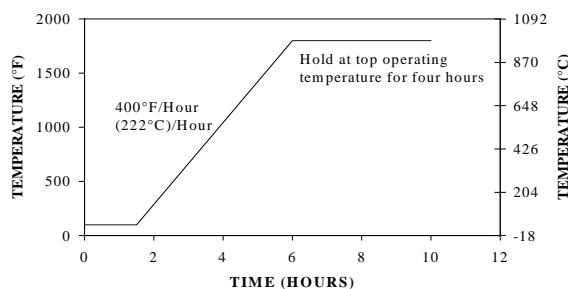
Chemical Analysis

Al ₂ O ₃	54.9%
SiO ₂	38.3%
TiO ₂	2.7%
Fe ₂ O ₃	0.9%
Others	1.8%
Alkalies	1.4%

Material Required	2.32 g/cm ³ (145 lbs/ft ³)
Grain Size	4.75 mm (4 mesh) and finer
Practical Temperature Limit	1649°C (3000°F)
Installation Method	Dry ram or vibrate

Packaged in 25 kg (55-lb.) multi-wall paper bags. Palletized 64 bags (1600 kgs or 3520 lbs.) per 42" x 42" pallet, protected with stretch film. Also available bulk packaging. Storage beyond 24 months is not recommended. Store in a dry location to avoid moisture pickup.

Sintering Schedule



Sintering Data

Initial Heat Set Temperature:	150°C (300°F)
Intermediate Heat Set Temperature:	760°C (1400°F)
Final Heat Set Temperature:	980°C (1800°F)

Allied Mineral Products, Inc. supplies an entire line of monolithic refractories for the metals industry. For more information or a complete evaluation of your refractory requirements, please contact your local Allied representative.

Warning: Contains phenolic resin, aluminum oxide, aluminosilicates, and silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica inhaled in the form of quartz or cristobalite carcinogenic to humans. Do not breath fumes or dust during installation and heating of this product. Avoid contact with skin and eyes. Protective gloves and long sleeve clothing must be worn when handling material. Wear NIOSH approved respirator during handling, installation, removal, and disposal to prevent inhalation of dust. Refer to Material Safety Data Sheet for additional information and disposal instructions. In case of eye contact, flush immediately and repeatedly with water and consult a physician. For safest use and optimum performance, proper practices must be followed.

Revised 8/15/06

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