

PRODUCT BULLETIN

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**ALLIED
MINERAL**
PRODUCTS, INC.

MINRO-AL[®] RAM A29

General Information

MINRO-AL[®] RAM A29 is a fused alumina-based, dry vibratable refractory designed for lining throats, floors, and uppercase sidewalls of channel induction furnaces melting and holding iron. MINRO-AL RAM A29 is also well suited for lining coreless induction furnaces melting all grades of copper-based alloys. This product offers the following features and benefits:

- > Completely dry with heat set bond
- > Exceptional non-wetting characteristics
- > Wear and corrosion resistance
- > Recommended for lower temperature copper alloy melting

Technical Data

<u>Chemical Analysis</u> (Major Components)	Material Required.....	3.04 g/cm ³ (190 lb./ft. ³)
Al ₂ O ₃ 88.7%	Grain Size	5 mm (3 mesh) and finer
SiC 3.7%	Maximum Practical Use Temperature.....	1650°C (3000°F)
SiO ₂ 3.6%	Minimum Use Temperature	760°C (1400°F)
TiO ₂ 2.5%	Installation Method	Dry ram or vibrate
Fe ₂ O ₃ 0.5%	Procedures	CL-1, CL-4, CL-5, CL-14, CL-17, CL-18, CH-20, CL-61

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

Sintering Data

Initial Hold Temperature: 540°C (1000°F)
Final Hold Temperature: 1150°C (2100°F) for Copper Alloys
Final Hold Temperature: 1480°C (2700°F) for Ferrous Alloys
Sinter Rate: 222°C (400°F)/Hour
Form Type: Removable

For applications above or below stated final hold temperature,
Sinter at operating temperature (Reference CL-14).

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 aluminum oxide, aluminosilicates, silicon carbide, 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. Refer to Material Safety Data Sheet for additional information and disposal instructions. Wear NIOSH approved respirator during installation, removal, and disposal of product to prevent inhalation of dust. 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.

Issue 5/5/05
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