

**ENGINEERED CERAMICS***(GAS FURNACE RAILS @ PLATE MILL)***T-73 Alumina Refractory**

Nominal Chemical Composition %	T-73 Alumina
Al ₂ O ₃	91.00
SiO ₂	8.75
Other (Na ₂ O & K ₂ O)	0.21
Typical Max. Operating temp.	3200°F 1760°C
Bulk Density lbs/ft ³	180-190
Apparent Porosity %	14 - 17
MOR, psi, Room Temperature	1800 - 2000
Thermal Shock	Good

Suggested Applications:

T-73 is a nominal 91% alumina with a premium matrix material that is excellent for molten metal contact where longer melt times at high temperatures are required. The suggested application is primarily for crucibles.

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Engineered Ceramics

CERAMIC RAILS

MATERIAL SAFETY DATA SHEET

Revised 7/1/09

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **HYCOR ALUMINA PRODUCTS**
TRADE NAME: **ALUMINA REFRACTORIES**
CHEMICAL NAME: **ALUMINA REFRACTORIES**
SYNONYMS: 28-6, TA-530, TA-530 FMS, HYcor® Plus, TA-540, TA-540F, TA-505, TA-505F, TA-507, TA-507F, TA-510F

COMPANY INFORMATION: Engineered Ceramics
P.O. Box 365, 24 West End Drive
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2. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT(S)	CAS. NO.	OSHA PEL (mg/M ³)	ACGIH TLV (mg/M ³)
Aluminum Oxide (Alumina)	CAS 1344-28-1	15.0 (5.0 Respirable)	10.0
Alumina Silicates (as nuisance dust)	CAS 1302-93-8	5.0	5.0

3. PHYSICAL/CHEMICAL CHARACTERISTICS

MELTING POINT:	3700°F	SOLUBILITY IN WATER:	Insoluble
BOILING POINT:	4000°F	SPECIFIC GRAVITY:	2.7-2.8
VAPOR PRESSURE (mm Hg):	None	EVAPORATION RATE (BuOAC = 1):	None
VAPOR DENSITY (Air = 1):	None	APPEARANCE AND ODOR:	White, odorless, hard refractory

4. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Non-Flammable
FLAMMABLE LIMITS:	None (LEL: None UEL: None)
EXTINGUISHING MEDIA:	N/A
SPECIAL FIRE FIGHTING PROCEDURES:	N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None

5. REACTIVITY DATA

STABILITY:	Stable (Conditions to avoid: None)
INCOMPATIBILITY (Materials to Avoid):	None
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Will Not Occur (Conditions to avoid: None)

6. HEALTH HAZARD DATA

***** The material as received presents no health hazard *****

The following pertains to dust generated by further grinding or fabrication.

ROUTE(S) OF ENTRY

INHALATION?	Yes
SKIN?	No
INGESTION?	No

HEALTH HAZARDS (Acute & Chronic): Low Health Risk by Inhalation. Mild Skin Irritation From Prolonged Exposure.

CARCINOGENICITY:

NTP?	No
IARC Monographs?	No
OSHA Regulated?	No

SIGNS AND SYMPTOMS OF EXPOSURE: The Dust May Cause Eye, Skin, And Upper Respiratory Irritation. Ingestion May Cause Irritation To The Gastrointestinal Tract.

EMERGENCY FIRST AID PROCEDURES: For Material In Eyes, Wash Immediately With Water. For Skin Irritation, Wash With Water. For Inhalation, Remove From Source Of Exposure. Seek Medical Attention If Irritations Persist.

7. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N/A

WASTE DISPOSAL METHOD: Dispose Of As Solid Waste In Accordance With Federal, State, And Local Laws.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Avoid Dusting

OTHER PRECAUTIONS: None

8. CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH Approved Respirator In Dusty Conditions (Such As Where Further Fabrication Takes Place)

VENTILATION: LOCAL EXHAUST: Yes
OTHER: None

PROTECTIVE GLOVES: Can Be Used To Protect Against Abrasions

EYE PROTECTION: Normal Protection Against Foreign Substances

OTHER PROTECTIVE EQUIPMENT: None

WORK/HYGIENIC PRACTICES: Standard Practices. Keep Dust to a Minimum