



Product Catalogue

*Since
1986*

Introduction

Refra Products is a manufacturer of castable refractory and monolithic products in Pakistan, offering a range of services and solutions to the oil, gas, and cement industries.

Founded in 1986, Refra Products is known for technical excellence, high-quality workmanship, unparalleled service, and innovative solutions to refractory problems.

Additionally, we strive to serve our customers in a friendly and reliable manner to ensure prompt and dependable service.

We offer a wide range of monolithic refractories, from 30% to 97% alumina, including mullite- and silicon carbide-based castables.

“











“One step at a time. You'll get there.”

”

PRODUCT NAME:
ZURIK REFRACTORY CASTABLE ZRF-C60 A

CLASSIFICATION:
HIGH ALUMINA LOW CEMENT CASTABLE
 (ALKALI RESISTANCE)
 (MULLITE BASED)
 (PP FIBER)

Imported

PROPERTY	CONDITION	VALUE
 Chemical Analysis (%)	Al ₂ O ₃	>60%
	SiO ₂	<35%
	Fe ₂ O ₃	<2.0%
	CaO	<2.5%
 Max. Service Temperature (°C)	—	1650
 Bulk Density (g/cm ³)	—	>2.45
 Cold Crushing Strength (MPa)	110 °C	>75
	1100 °C	>80
	1500 °C	>100
 Modulus of Rupture (MPa)	110 °C	>11
	1100 °C	>12
	1500 °C	>13
 Permanent Linear Change (%)	1100 °C	-0.1
 Type of Installation	—	With water/vibration
 Storage Period (dry, cool and no frost)	—	12 Months
 Package	—	Kraft Paper Bag
 Grain Size	—	0-6 mm

“ One step at a time. You'll get there. ”

Mughal Steel- 36.5 MW Hybrid Power Project



We have been
awarded the Supply
and Installation of
Refractory Material
by Mughal Steel



Sic Castable 30

Silicon Carbide Castable



HIGH PERFORMANCE REFRACTORY CASTABLE

SIC Castable 30 is a premium quality silicon carbide based refractory castable, engineered for superior abrasion resistance, high-temperature strength and excellent thermal shock stability.



CHEMICAL COMPONENTS (%)

Al_2O_3	>48%
SiO_2	<15%
SiC	>30%
Fe_2O_3	<1.5%
CaO	<2.5%

TYPICAL PROPERTIES

Grain Size	5 mm
Bulk Density	>2.7 g/cm ³
Max Service Temperature	1600°C
Type of Bonding	With Water / Vibration or Casting



High Abrasion
Resistance



High Temperature
Stability



Excellent Thermal
Shock Resistance



Longer Service
Life

“ Engineered for excellence.
Built for extreme conditions. ”

MADE IN CHINA

Zrf Sic 60

Silicon Carbide Castable

High performance castable engineered for excellent abrasion resistance and thermal stability in high temperature applications.



CHEMICAL COMPONENTS (%)

	Al ₂ O ₃	>15%
	SiO ₂	<20%
	SiC	>60%
	Fe ₂ O ₃	<1.5%
	CaO	<3%



Grain Size
5 mm



Bulk Density
>2.35 g/cm³



Max Service Temperature
1650°C



Type of Bonding
With Water / Vibrating or Casting



High Abrasion
Resistance



Excellent Thermal
Stability



Long Service
Life



Easy Placement
& Casting



Made In China







Imported




RF HM HD CAST 97 CASTABLE CORUNDUM 97%

High purity castable corundum with 97% Al_2O_3 for superior refractoriness, abrasion resistance and thermal stability.



CHEMICAL COMPONENTS %

	Al_2O_3	> 97%
	SiO_2	< 1%
	CaO	< 2.5%
	Fe_2O_3	< 0.3%

PROPERTY	VALUE
 Grain Size	0 - 3 mm
 Max Service Temp (°C)	1800
 Bulk Density (g/cm ³)	> 2.85



Made In China



IMPORTED

CASTABLE REFRA DUR 70



CHEMICAL COMPONENTS %

▶ Al_2O_3	> 70%
▶ SiO_2	< 25%
▶ CaO	< 5%
▶ Fe_2O_3	< 2.0%

 **BULK DENSITY** > 2.4

 **GRAIN SIZE** 0–5mm



**MAXIMUM SERVICE
TEMPERATURE**

(°C) **1650**



**MADE IN CHINA
IMPORTED**

CALDE® CAST F 60 CO

PRODUCT TYPE

	: Alumina - Silica product Regular Castable
Maximum recommended temperature	: 1650°C
Main component	: Low iron chamotte
Type of bond	: Hydraulic
Appearance	: Dry, for addition of water
Packaging	: Sacks
Shelf life	: 12 months
Installation method	: Vibrating
Maximum grain size	: 6 mm
Material required	: 2.23 T/m ³
Drinking water required for mixing on site	: 10.0 / 10.4 litres per 100 kg of dry material
Guidelines	: Installation Nr 5

PRODUCT PROPERTIES	STANDARD	AVERAGE VALUES	UNITS
CHEMICAL ANALYSIS			
Al ₂ O ₃	EN ISO 1927-3	59.0	%
SiO ₂	EN ISO 1927-3	34.0	%
CaO	EN ISO 1927-3	4.5	%
Fe ₂ O ₃	EN ISO 1927-3	0.7	%
PHYSICAL PROPERTIES			
Measured on samples prepared according to	EN ISO 1927-5	-	-
Bulk density			
after drying at 110 °C	EN ISO 1927-6	2.29	g/cm ³
after firing at 800 °C	EN ISO 1927-6	2.21	g/cm ³
Cold crushing strength			
after drying at 110 °C	EN ISO 1927-6	50	MPa
after firing at 800 °C	EN ISO 1927-6	50	MPa
after firing at 1200 °C	EN ISO 1927-6	30	MPa
after firing at 1600 °C	EN ISO 1927-6	95	MPa
Permanent linear change			
after firing at 800 °C	EN ISO 1927-6	-0.1	%
after firing at 1200 °C	EN ISO 1927-6	-0.1	%
after firing at 1600 °C	EN ISO 1927-6	-1.2	%
Thermal conductivity			
at a mean temperature of 800 °C	EN ISO 1927-8	1.18	W/mK
at a mean temperature of 1000 °C	EN ISO 1927-8	1.17	W/mK
at a mean temperature of 1200 °C	EN ISO 1927-8	1.31	W/mK
Carbon monoxide resistance	EN ISO 12676	A/B	-
Reversible thermal expansion after firing [20-1000 °C]		0.67	%

Commercial Code : MAC50083

Version : 11

Date : 29/10/2013

The data are current production averages. They cannot be used as limits for a specification.

CALDERYS France

P.O. Box 262130, LOB# 17, Office, 238, Jebel Ali Free Zone, Dubai, U.A.E.

Tel: +971 4 880 8878 | Fax: +971 4 880 8848



CALDE[®] CAST T 97

PRODUCT TYPE	: Alumina product Regular Castable
Maximum recommended temperature	: 1820°C
Main component	: Tabular alumina
Type of bond	: Hydraulic
Appearance	: Dry, for addition of water
Packaging	: Sacks
Shelf life	: 12 months
Installation method	: Vibrating
Maximum grain size	: 6 mm
Material required	: 2.70 T/m ³
Drinking water required for mixing on site	: 8.0 / 9.6 litres per 100 kg of dry material
Guidelines	: Installation Nr 5

PRODUCT PROPERTIES	STANDARD	AVERAGE VALUES	UNITS
CHEMICAL ANALYSIS			
Al ₂ O ₃	EN ISO 1927-3	96.5	%
CaO	EN ISO 1927-3	2.8	%
SiO ₂	EN ISO 1927-3	0.1	%
Fe ₂ O ₃	EN ISO 1927-3	0.1	%
PHYSICAL PROPERTIES			
Measured on samples prepared according to Bulk density	EN ISO 1927-5	-	-
after drying at 110 °C	EN ISO 1927-6	2.78	g/cm ³
after firing at 800 °C	EN ISO 1927-6	2.68	g/cm ³
Cold crushing strength			
after drying at 110 °C	EN ISO 1927-6	45	MPa
after firing at 800 °C	EN ISO 1927-6	40	MPa
after firing at 1200 °C	EN ISO 1927-6	35	MPa
after firing at 1600 °C	EN ISO 1927-6	60	MPa
Permanent linear change			
after firing at 800 °C	EN ISO 1927-6	-0.2	%
after firing at 1200 °C	EN ISO 1927-6	-0.1	%
after firing at 1600 °C	EN ISO 1927-6	+0.2	%
Thermal conductivity			
at a mean temperature of 800 °C	EN ISO 1927-8	2.13	W/mK
at a mean temperature of 1000 °C	EN ISO 1927-8	2.08	W/mK
at a mean temperature of 1200 °C	EN ISO 1927-8	2.08	W/mK
Carbon monoxide resistance	EN ISO 12676	A/B	-
Reversible thermal expansion after firing [20–1000 °C]	-	0.80	%

Commercial Code : MAC90087

Version : 12

Date : 30/10/2013

The data are current production averages. They cannot be used as limits for a specification.





CASTABLE

TROWELING 50%

 LOCAL

CHEMICAL COMPONENTS (%)

Al_2O_3	>50%
SiO_2	<40%
CaO	<8%
Fe_2O_3	<2%



MAX SERVICE TEMP (°C)

1500



BULK DENSITY (g/cm³)

> 2.1



MAX GRAIN SIZE (mm)

5

STEEL FIBER 446



Grade 446

应用



耐热材料 (可达到 1200°C)



耐火浇注料



钢铁&水泥行业



炉窑&冶金行业

化学成分 (最大值)

C	Si	Mn	P	S	Cr	Ni
0.3	2.0	2.0	0.045	0.03	23.0-27.0	1.0

物理性能

 熔点	1430-1500 °C	 金属组织	铁素体
 使用温度	1100 °C	 磁性	有磁性
 屈服强度	293 MPa (N/mm ²)	 长度	可定制 10 - 50 mm
 抗拉强度	850 MPa (N/mm ²)	 等效直径	可定制 0.2 - 1.0 mm
 密度	7.80 (g/cm ³)		



MADE IN CHINA

IMPORTED

Ceramic Bulk

Ceramic Fiber Series

Ceramic Fiber Bulk

Product Grade and Code

Standard Purity Spun Ceramic Fiber Bulk	MYTX-1260-21
Standard Purity Blown Ceramic Fiber Bulk	MYTX-1260-11
High Purity Spun Ceramic Fiber Bulk	MYTX-1260A-21
High Alumina Blown Ceramic Fiber Bulk	MYTX-1350-11
Low Zirconium Spun Ceramic Fiber Bulk	MYTX-1400-21
Zirconium Spun Ceramic Fiber Bulk	MYTX-1430-21
Zirconium Blown Ceramic Fiber Bulk	MYTX-1430-11



Product Description

Ceramic fiber bulk is produced by melting high purity raw materials in resistance furnace, then adopt blown/spinning process, the bulk is loose fiber without secondary processing and heat treatment.

Ceramic fiber textile bulk is special processed spun fiber bulk, fiber diameter is uniform, has higher yarn rate, is ideal raw material of ceramic fiber textiles.

Typical Features

- Low heat capacity, low thermal conductivity
- Excellent thermal stability
- Excellent chemical stability
- Binder free and corrosion free

Typical Application

- High temp gaskets sealing
- Feed material for high temp textiles
- Feed material for board, paper, vacuum forming shapes etc wet processing products

Typical Properties

Product Code	Classification Temp (°C)	Fiber Diameter (μm)	Shot Content (Φ≥0.212mm)(%)	Chemical Composition(%)			
				Al ₂ O ₃	ZrO ₂	Al ₂ O ₃ +SiO ₂	Al ₂ O ₃ +SiO ₂ +ZrO ₂
MYTX-1050-21	1050	3-5	≤20	≥40	-	≥95	-
MYTX-1260-21	1260	3-5	≤20	≥43	-	≥97	-
MYTX-1260-11	1260	2-4	≤20	≥43	-	≥97	-
MYTX-1260A-21	1260	3-5	≤20	≥44	-	≥97.5	-
MYTX-1350-11	1350	2-4	≤20	≥52	-	≥98.5	-
MYTX-1400-21	1400	2-4	≤20	-	≥5	-	≥99
MYTX-1430-21	1430	2-4	≤20	-	≥15	-	≥99
MYTX-1430-11	1430	2-4	≤20	-	≥15	-	≥99

※Note: Test data shown are average results of tests conducted under standard procedures and are subjects to variation. If need further product details, pls contact technical dept of Shandong Minye.

STEEL FIBER 310



GRADE 310

High-performance austenitic stainless steel fibers engineered for superior strength, oxidation resistance, and durability in extreme temperature environments.



1. APPLICATIONS

- ✓ Refractory Industry (Temperature up to 1200°C)
- ✓ Reinforced & Refractory Castables
- ✓ Petrochemical & Oil Industry
- ✓ Metallurgy Industry



2. CHEMICAL COMPOSITION (MAXIMUM)

C	Si	Mn	P	S	Cr	Ni	Others
0.3	2.0	2.0	0.045	0.03	24.0-26.0	19.0-22.0	Balance



3. TECHNICAL PROPERTIES / SPECIFICATIONS

PROPERTY	VALUE	PROPERTY	VALUE
 Melting Temperature	1410-1460 °C	 Microstructure	Austenite
 Application Temperature	1180 °C	 Magnetism	Non
 Yield Strength	215 MPa (N/mm ²)	 Length	Customized 10-50 mm
 Tensile Strength	530 MPa (N/mm ²)	 Equivalent Diameter	Customized 0.2-1.0 mm
 Density	7.93 (g/cm ³)		

JM23

INSULATING FIREBRICK

SIZE:

230 × 114 × 65 MM



TECHNICAL DATA SHEET



CHEMICAL COMPOSITION

Al ₂ O ₃	>40%
SiO ₂	<55%
CaO	<0.8
Fe ₂ O ₃	<1.2%



PHYSICAL TECHNOLOGY DATA

Color	White
Max Working Temp	1260C
Bulk Density	0.8g/cm ³
Cold Crushing Strength	1.8Mpa
Modulus of Rupture	1.7Mpa
Thermal Conductivity (W/m.k)	
At 350C	0.27
At 400C	0.29
At 600C	0.32



MADE IN CHINA



IMPORTED

Premium

REFRACTORY CASTABLE ZRF KLT 3000

High Performance Castable for
Extreme Heat and Strength



Engineered for Extreme Performance

ZRF KLT 3000 is a high strength, low cement castable designed for demanding refractory applications. It offers excellent resistance to thermal shock, high temperature and abrasion, ensuring long service life and operational reliability.

KEY BENEFITS



High Refractoriness

Withstands temperatures up to 1650°C



Excellent Thermal Shock Resistance

Stable performance under rapid temperature changes



High Mechanical Strength

Superior resistance to wear and abrasion



Long Service Life

Enhanced durability for reduced downtime



Reliable & Consistent Quality

Manufactured under strict quality control standards

TECHNICAL DATA SHEET



CHEMICAL COMPOSITION (%)

Al ₂ O ₃	>55%
SiO ₂	<40%
CaO	<0.8%
Fe ₂ O ₃	<1.0%



PHYSICAL & PERFORMANCE PROPERTIES

Bulk Service Temperature	1650°C
Bulk Density	110° g/cm ³
Cold Crushing Strength	>25 MPa (110°C)
Modulus of Rupture	>4 MPa (1200°C)
Thermal Conductivity (W/m.k)	
At 350°C	0.27
At 400°C	0.29
At 600°C	0.32
Permanent Linear Change	< -0.5% (1200°C)
Type of Installation	With water / Vibration Cast
Storage Period (dry, cool and frosty)	10 – 12 Months depending on place and climate

APPLICATIONS



Refractory
Lining



Steel & Iron
Industry



Petrochemical
Plants



Cement & Lime
Industry



High Temperature
Resistance



Thermal Shock
Stable



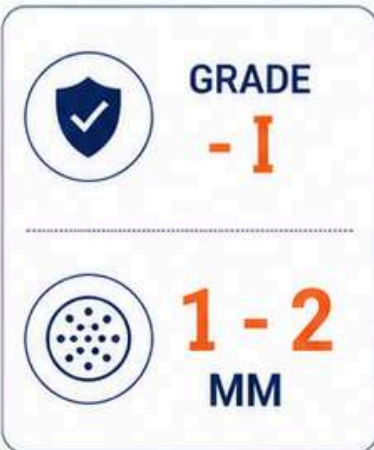
Long Lasting
Performance



Consistent
Quality



SILICA SAND





SILICA SAND

 **Local**



 **GRADE
- II**



1 - 35 MM
(500 MICRON - 1 MM)



**PREMIUM
QUALITY**



**CONSISTENT
PERFORMANCE**



**RELIABLE FOR
INDUSTRIAL USE**



www.refra.com.pk



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 **Local**

SILICA SAND

Fine, high-purity silica sand
for industrial excellence.



 GRADE - III	 35 - 90 MIC (90 MIC - 500 MICRON)
--	---

 **PREMIUM
QUALITY**

 **CONSISTENT
PERFORMANCE**

 **RELIABLE FOR
INDUSTRIAL USE**

STAINLESS STEEL ANCHORS

Custom Fabricated Refractory Anchors

We manufacture stainless steel anchors including V anchors, Y anchors, and strip anchors in various designs according to client requirements.

Available grades mainly include SS 304, SS 316, and SS 310.

Standard sizes available: 6 mm, 8 mm, 10 mm, 12 mm, 14 mm, and 16 mm.



AVAILABLE DESIGNS
V, Y & Strip Anchors



GRADES
SS 304 /
316 / 310



SIZES
6–16 mm



CUSTOM FABRICATION
Available as per client requirements

V ANCHORS



Y ANCHORS



STRIP ANCHORS



APPLICATIONS



REFRACTORY LINING



FURNACES



KILNS



INDUSTRIAL HEAT APPLICATIONS



SS 310 Round Bar

Chemical Analysis / Test Report



ALLOY IDENTIFIED: 310 - Exact

Element	Test Result (%)	SS 310 Specification (%)
Fe	53.55	44.98 – 56.00
Cr	25.63	24.00 – 28.00
Ni	19.82	20.00 – 22.00
Mn	0.94	0.00 – 2.00
Mo	0.047	0.00 – 0.70



The chemical composition of the tested sample conforms to SS 310 (UNS S31008) stainless steel grade within the specified limits.

PADDLE MIXER MACHINE

Efficient Mixing Equipment for Refractory Applications



APPLICATIONS

- Refractory castable mixing
- Site material preparation
- Batch mixing
- Industrial use

KEY FEATURES

- Heavy-duty build
- Efficient paddle mixing
- Easy mobility
- Reliable motor drive
- User-friendly operation

MACHINE HIGHLIGHTS



Top Safety Grill with Paddle



Powerful Motor with Belt Drive System



Secure Locking Mechanism



Robust Base with Easy Mobility



HEAVY-DUTY
CONSTRUCTION



EFFICIENT &
CONSISTENT MIXING



EASY
MOBILITY



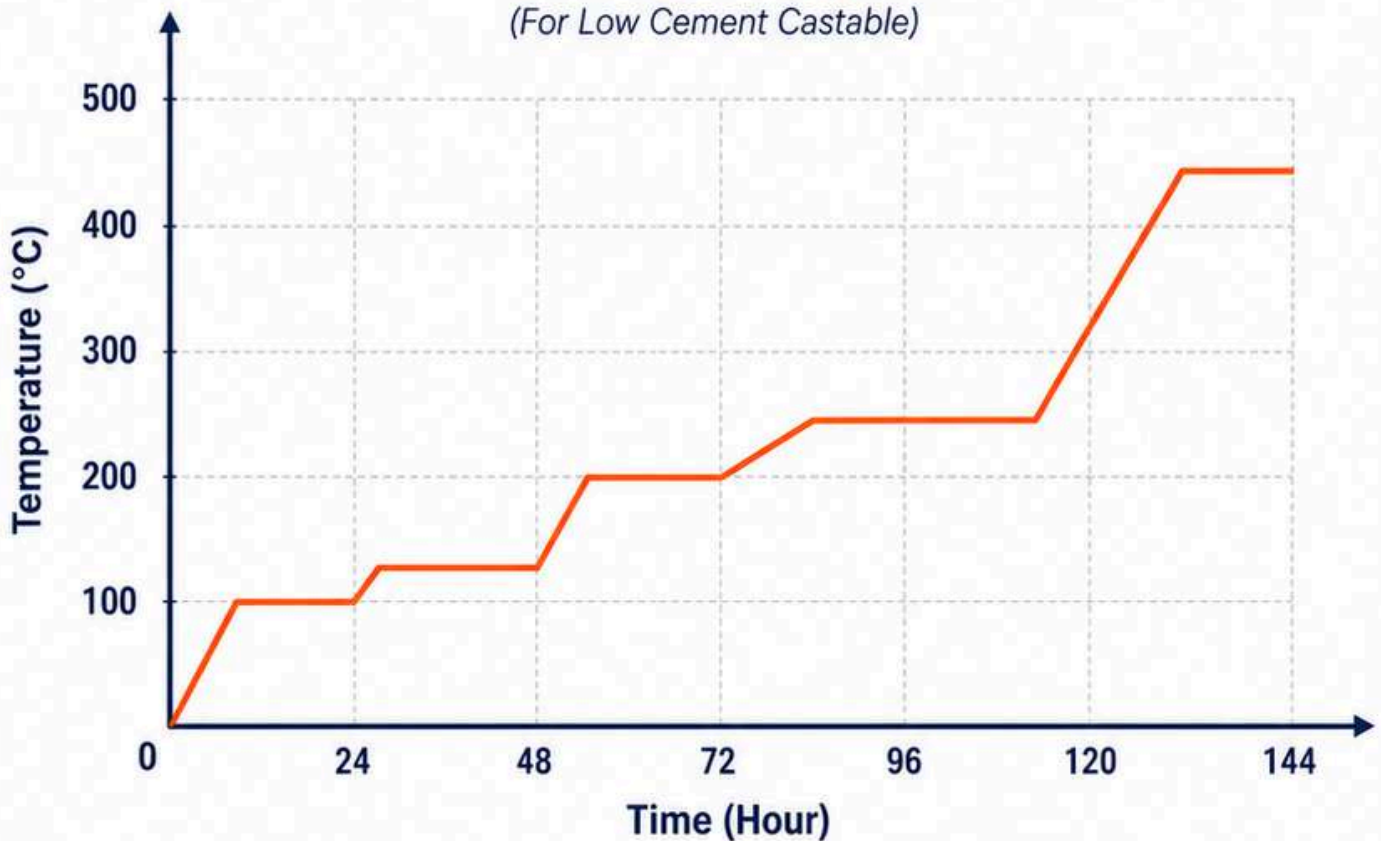
RELIABLE
MOTOR DRIVE

LOW CEMENT CASTABLE DRY OUT DIAGRAM

Recommended Heating Schedule

Heating Diagram

(For Low Cement Castable)



Follow the recommended heating schedule to ensure safe dry-out and optimum refractory performance.



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www.refra.com.pk


RCF BOARD

RCF Board is a lightweight, high performance refractory insulation material manufactured from Ceramic Fibers.

 Low Thermal Conductivity

 Excellent Thermal Shock Resistance

 Lightweight & Easy to Install

 Chemical Stability & Durable

TYPICAL APPLICATION

-  Hot-face or backup insulation
-  Fire Protection System
-  Rigid high temperature gaskets and seals
-  Heat shields
-  Domestic boiler insulation
-  Distribution lining for metal
-  A wide range of products

TYPICAL PRODUCT PROPERTIES

Product Name	Normal Kaolin	Standard Purity	High Purity	High Al Purity	Lower AZS	Standard AZS
Temperature Grade °C	1050	1260	1260	1300	1300	1430
Recommended Operating Temperature °C	≤950	≤1100	≤1150	≤1200	≤1200	≤1250
Permanent Linear Shrinkage (%)	950°C×24h≤4	1000°C×24h≤4	1100°C×24h≤4	1200°C×24h≤4	1250°C×24h≤4	1350°C×24h≤4
Thermal Conductivity (Mean Temp 500°C) W/(m.k)	≤0.153					
Water Content (%)	≤1					
Loss on ignition (%)	≤8					
Nominal Density (kg/m ³)	220~400					
Al ₂ O ₃ (%)	34~36	36~38	39~42	45~47	38~40	
Al ₂ O ₃ +SiO ₂ (%)	≥95	≥96	≥98	≥99	≥90	
Al ₂ O ₃ +SiO ₂ +ZrO ₂ (%)						≥99
ZrO ₂ (%)					5~7	≥15
Fe ₂ O ₃ (%)	<1.0	<0.5				
Availability Standard	600/1200mm Width; 900mm/1000mm Length; Thickness 3mm~100mm					

Note: Test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. The products listed comply to ASTM C892.

RCF BLANKET

RCF Blanket is a lightweight, high performance refractory insulation material manufactured from Ceramic Fibers.

-  Low Thermal Conductivity
-  Excellent Thermal Shock Resistance
-  Lightweight & Easy to Install
-  Chemical Stability & Durable



TYPICAL APPLICATION



Furnace lining



Backup lining



High Temp pipe wrap



Fire Protection



Feed stock for module



A wide Range of Products

TYPICAL PRODUCT PROPERTIES

Blanket Product	Normal Kaolin	Standard Purity	High Purity	High Al Purity	Lower AZS	Standard AZS
Temperature Grade°C	1050	1260	1260	1300	1300	1430
Recommended Operating Temperature°C	≤950	≤1100	≤1150	≤1200	≤1200	≤1250
Permanent Linear Shrinkage (%)	950°C×24h≤4	1000°C×24h≤4	1100°C×24h≤4	1200°C×24h≤4	1250°C×24h≤4	1350°C×24h≤4
Thermal Conductivity (Mean Temp 500°C) W/(m-k)	≤0.153					
Shot Content ($\Phi \geq 0.212\text{mm}$) (%)	≤20	≤20	≤20 (Kaolin)	≤15 (HP)	≤20 (Kaolin)	≤15 (HP)
Tensile Strength (for 25mm thickness blanket) (MPa)	≥0.04					
Nominal Density (kg/m ³)	64/96/128/160					
Al ₂ O ₃ (%)	≥40	≥43	≥44	≥52		
Al ₂ O ₃ + SiO ₂ (%)	≥95	≥97	≥98.5	≥98.5		
Al ₂ O ₃ + SiO ₂ + ZrO ₂ (%)					≥99	≥99
ZrO ₂ (%)					5-7	≥15
Fe ₂ O ₃ (%)	≤1.0	≤1.0	≤1.0 (Kaolin)	≤0.5 (HP)	≤1.0 (Kaolin)	≤0.5 (HP)
Availability (Standard Product)	T: 6mm~60mm; W: 610mm/1220mm; L: 7320mm/7620mm for 25mm thickness (3810mm for 50mm T; 5490mm for 38mm T)					

Note: Test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. The products listed comply to ASTM C892.

CERAMIC FIBER PAPER



Flexible, tough and high-performance insulation paper for high-temperature sealing and insulation applications.

PRODUCT GRADE AND CODE

Standard Purity Ceramic Fiber Paper	MYTX-1260HP-54
High Alumina Ceramic Fiber Paper	MYTX-1350-54
Standard Zirconium Ceramic Fiber Paper	MYTX-1430-54

PRODUCT DESCRIPTION

Ceramic fiber paper takes blown fiber bulk as raw material, adding a specific ratio binder and produced in wet processing technology. Paper is flexible and tough, has excellent tensile strength, and the hardness can be adjusted, making it an ideal high-performance high-temperature sealing insulation material.

TYPICAL FEATURES

- Excellent electrical insulation
- Excellent mechanical processing
- High tear resistance
- High flexibility, precise thickness
- Low shot content
- Low heat capacity, low thermal conductivity

TYPICAL APPLICATIONS

- Industrial insulation, sealing, anticorrosion
- Electrical heating device insulation
- Instrument equipment insulation
- Insulation for expansion joints
- Industrial insulation materials
- Molten metal gasket
- Fireproof
- Insulation in automobile
- Heat shields and gaskets

TYPICAL PROPERTIES

Property	MYTX-1260HP-54	MYTX-1350-54	MYTX-1430-54
Classification Temp (°C)	1260	1350	1430
Density (kg/m ³)	180–210	180–210	180–210
Permanent Linear Shrinkage (%)	1100°C×24h≤4	1200°C×24h≤4	1350°C×24h≤4
Tensile Strength (MPa)	0.15	0.15	0.15
Loss on Ignition (%)	≤10	≤10	≤10
Water Content (%)	≤2	≤2	≤2
Availability (mm)	Length and width per regular size, thickness 0.8–10 mm	Length and width per regular size, thickness 0.8–10 mm	Length and width per regular size, thickness 0.8–10 mm



Available widths: 610 mm or 1220 mm. Common lengths: 10 m, 20 m, 30 m, 40 m, 80 m.










ZRF INS 40

INSULATION CASTABLE

TECHNICAL DATA



	Alumina	> 40%
	SiO ₂	< 45%
	CaO	< 10%
	Fe ₂ O ₃	< 2.5 %
	Max Service Temperature (°C)	1350
	Bulk Density (kg/m ³)	<1350
	Grain Size	6 mm



MADE IN CHINA

IMPORTED

FOAM GLASS

INSULATION PIPES & BOARD



PIPES



BOARDS



INSULATION

GLASSWOOL PIPES / BLANKET & BOARDS



GLASSWOOL
PIPES



FOIL FACED
GLASSWOOL PIPES



GLASSWOOL
BLANKET



FOIL FACED
GLASSWOOL BLANKET



FOIL FACED
GLASSWOOL BOARDS



GLASSWOOL
BOARDS



CALCIUM SILICATE PIPE & BOARD

High performance insulation solutions for thermal efficiency, fire protection and energy conservation.

PIPES



Calcium silicate pipe sections for insulation of hot & cold piping systems.

SHAPED SECTIONS



Pre-formed and grooved sections for easy installation and secure fitting.

BOARDS



Calcium silicate boards offering excellent thermal insulation and fire resistance.

PIPE BLOCKS



Pipe blocks for high temperature insulation in industrial applications.

CURVED PIECES (PACKING)



Curved packing pieces for precise insulation and gap filling in pipe systems.



Fire Resistant



High Thermal Insulation



Lightweight & Easy to Install



Durable & Long Lasting

CERAMIC FIBER BOARD / BLANKET / PIPE



ROCKWOOL

— Thermal Insulation Material —



EXCELLENT THERMAL
INSULATION



HIGH TEMPERATURE
RESISTANCE



DURABLE &
LONG LASTING



INDUSTRIAL INSULATION PROJECTS

High-performance insulation solutions engineered for efficiency, safety and long-term reliability.



**THERMAL
EFFICIENCY**



**ENERGY
SAVINGS**



**SAFETY
COMPLIANCE**



**LONG-TERM
RELIABILITY**





POLYURETHANE RIGID FOAM INSULATION

Pipe Sections, Slabs & Fittings



1. OVERVIEW

BASF rigid polyurethane foam is produced using environmentally friendly CFC free chemicals and is manufactured from BASF polyurethane chemical designed to provide excellent thermal and acoustical properties.



2. USES

BASF rigid polyurethane foam has diverse application especially within the Oil, Petrochemical and General Insulation Industries. It is used for pipe, tank and vessel insulation in process plants, and for the insulation of road and rail tankers. BASF Polyurethane Foam is also ideal for moulding and complex shapes can be manufactured as formers or for insulation of large irregular objects. Moulded pipe sections and flange boxes are regularly used for pipe insulation.



3. QUALITY

It has been put through stringent test in our in-house laboratory ensuring its high quality and meeting industrial requirements.



4. ADVANTAGES

Polyurethane foam has a unique advantage over other insulation materials. Applied as preformed slab stock, froth or sprayed foam, it provides greater insulation efficiency than glass fibre, expanded polystyrene, phenol resins or any other commercially available insulation materials of comparable thickness. In fact, polyurethane is nearly twice as efficient as the next best insulation material and is highly recommended by engineers, builders and designers.

5. CHARACTERISTICS OF POLYURETHANE FOAM

- Low thermal conductivity – (0.023 W/mK)
- Low moisture vapour permeability
- Adds to structural strength
- Superior dimension stability
- Economical – Cost savings
- Extremely light weight and easy to install
- Unaffected by fungus or mildew
- Odourless
- Thermal stability – service temp from -183°C to 110°C (-297.4° F to +230° F)

6. AVAILABILITY

- Slabs
- Cut Pipe Sections and Bends
- Sectional for Pipes and Fittings
- Radiused and Bevelled Segments
- Curve segments for equipments and sphere
- Standard Slab 610 × 1220, 1220 × 2440, 2440 × 1000 mm
- For standard sizes and non-standard pipe sizes single layer, multi-layer or rebated joints are available upon request. The foam complies with ASTM C591.

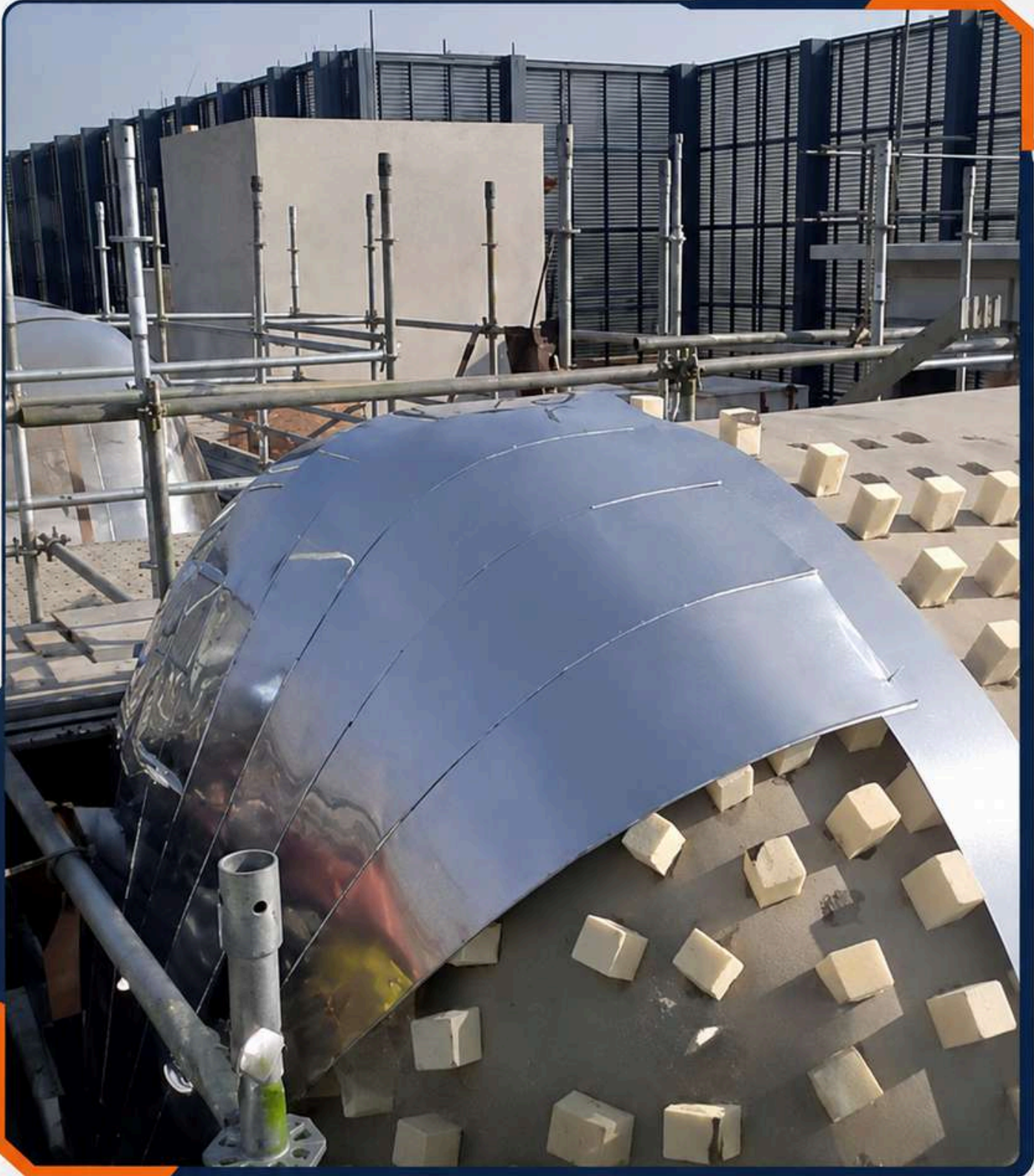
GENERAL PHYSICAL PROPERTIES OF POLYURETHANE FOAM

Property	Unit	35	45	55	Test Method
Density	Kg/m ³	35	45	55	DIN EN ISO 845
Service Temperature	Deg.C	110	110	110	—
Compressive Strength	Kg/cm ²	2.3	2.7	3.3	DIN 53421
Tensile Strength	Kg/cm ²	4.1	5.1	6.9	DIN 53430
Shear Strength	Kg/cm ²	1.1	1.9	2.7	DIN 53427
Thermal Conductivity	W/mK	0.020	0.023	0.024	DIN 52612
Flammability	Standard	B2	B2	B2	DIN 4102 Part 1
Water Absorption	% Vol.	1.1	1.1	1.0	DIN 53428
Closed Cell Content	%	90–95	90–95	90–95	DIN ISO 4590
Dimensional Stability	%	-0.5 / +1.0	-0.2 / +0.4	-0.2 / +0.4	DIN 53431, 72 hrs @ -30°C / +80°C / +100°C

Disclaimer: The information contained herein is accurate and reliable to the best of our knowledge. However, no express or implied warranty of any kind, including merchantability or fitness for a particular purpose, is made as to the performance of an installation. In no event shall the distributor be liable for any such damages claimed.

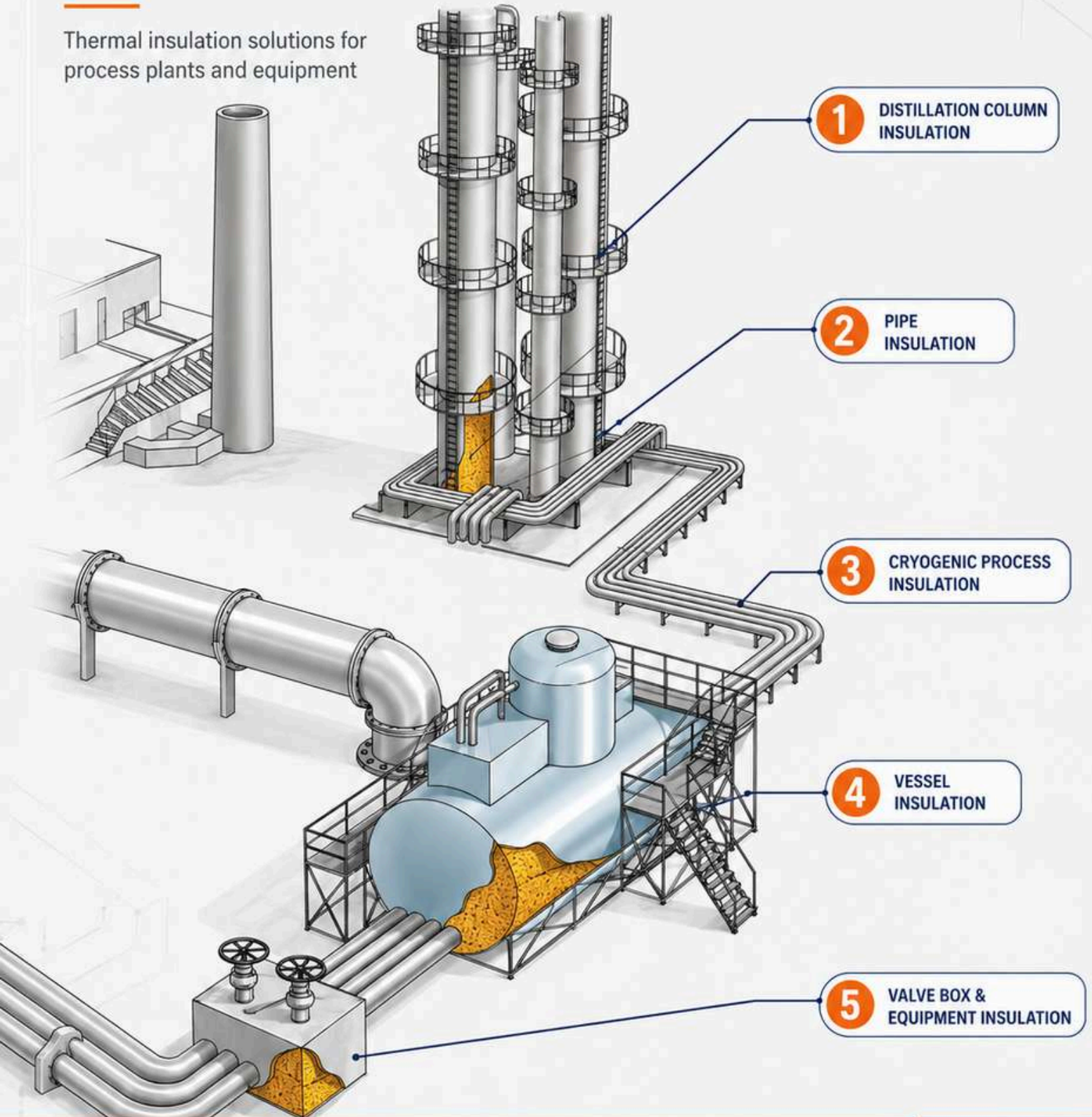
PROJECT EXECUTION

ON-SITE INSTALLATION



INDUSTRIAL INSULATION APPLICATIONS

Thermal insulation solutions for
process plants and equipment



1 DISTILLATION COLUMN
INSULATION

2 PIPE
INSULATION

3 CRYOGENIC PROCESS
INSULATION

4 VESSEL
INSULATION

5 VALVE BOX &
EQUIPMENT INSULATION

CERAMIC FIBER STRIP

CERAMIC FIBER STRIP



SELF TAPPING
SCREW



SS 304 CLIP



INDUSTRIAL INSULATION & REFRACTORY PROJECTS

Field work and installation highlights.



SAFE EXECUTION

Strict safety standards at every step.



QUALITY WORKMANSHIP

Skilled teams delivering precision and durability.



INDUSTRY FOCUSED

Experience across oil & gas, petrochemical and power.



END-TO-END SOLUTIONS

From planning to installation and commissioning.



FOAMGLAS®

Pittsburgh Corning

Protecting Companies and Their People Worldwide



INDUSTRIAL PIPING, DUCTS AND EQUIPMENT

FOAMGLAS® insulation is a lightweight, rigid material composed of millions of completely sealed glass cells. Each cell is an insulating entity. FOAMGLAS® insulation's all-glass, closed-cell structure provides the following benefits:

- Constant Insulating Efficiency
- Zero Water Vapor Permeability
- Moisture Resistance
- Fire Protection
- Corrosion Resistance
- Long-Term Dimensional Stability
- Vermin Resistance
- CFC and HCFC Free

These benefits result in FOAMGLAS® Insulation Systems that are long-lasting, require little maintenance and are ideal for:

- Low temperature pipe, equipment, tanks and vessels
- Medium and high temperature pipes and equipment
- Hot oil and hot asphalt storage tanks
- Heat transfer fluid systems
- Hydrocarbon processing systems
- Chemical processing systems
- Above ground and underground steam and chilled water piping
- Commercial piping and ductwork

Manufactured to comply with ASTM C552-07.

FOAMGLAS® insulation is manufactured by Pittsburgh Corning in a basic block form. Blocks are fabricated into a wide range of shapes, thicknesses and sizes to satisfy industrial insulation requirements.

PHYSICAL AND THERMAL PROPERTIES OF FOAMGLAS® ONE™ INSULATION

PHYSICAL PROPERTIES	SI	ENGLISH	ASTM STANDARD	EUROPEAN STANDARD
Absorption of Moisture (% by Volume)	0.2%	0.2%	C 240	EN 1609
Only moisture retained is that adhering to surface cells after immersion				
Water-Vapor Permeability	0.00 perm-cm	0.00 perm-cm	E96 Wet Cup, Procedure B	EN ISO 10456
Acid Resistance	Impervious to common acids and their fumes except hydrofluoric acid			
Capillarity	None	None		EN 1609
Combustibility	Noncombustible, will not burn.		E 136	EN ISO 1182 (Class A1)
Composition	Soda-lime silicate glass — inorganic with no fibers or binders.			
Compressive Strength Average for Standard Material (+/-10%)	600 kPa	90 psi	C 165 C 240 C 552	EN 826
Density, Average	120 kg/m ³	7.5 lb/ft ³	C 303	
Dimensional Stability	Excellent — does not shrink, swell or warp.			EN 1604
Flexural Strength, Block Average	480 kPa	70 psi	C 203 C 240	
Hygroscopicity	No increase in weight at 90% relative humidity.			EN 12089
Linear Coefficient of Thermal Expansion 25°C to 300°C (75°F to 575°F)	9.0 x 10 ⁻⁶ /°F	5.0 x 10 ⁻⁶ /°F	E 228	EN 13571
Maximum Service Temperature	480°C	+900°F		EN 14706
Modulus of Elasticity, Approx.	900 MPa	1.3 x 10 ³ psi	C 623	
Thermal Conductivity	0.039 @ 0°C 0.040 @ 10°C	0.29 @ 75°F 0.28 @ 50°F	C 177 C 518	EN 12667 EN 12939
Specific Heat	0	0		
Thermal Diffusivity	4.2 x 10 ⁻⁷ m ² /sec	0.016 ft ² /hr		

Notes: Measurements were collected using ASTM guidelines and, unless otherwise specified, properties were collected at 24°C (75°F). Properties may vary with temperature. The measurements listed in the table are average or typical values recommended for design purposes, and are not intended as specification or limit values.





CERTIFICATE OF APPRECIATION

Presented to:

M/S RefraProducts

for their significant contribution during

PARCO Mid Country TA 05

by providing

Refractory Services

Subcontracted by:

Descon Engineering Limited
Industrial Services Division



Handwritten signature of Ciprian Gheordun in blue ink.

CIPRIAN GHEORDUN
Head Supply Chain Management










Handwritten signature of Shahzad Malik in blue ink.

SHAHZAD MALIK
Head Operations – ISD Pakistan

INSULATING TODAY FOR A BETTER TOMORROW

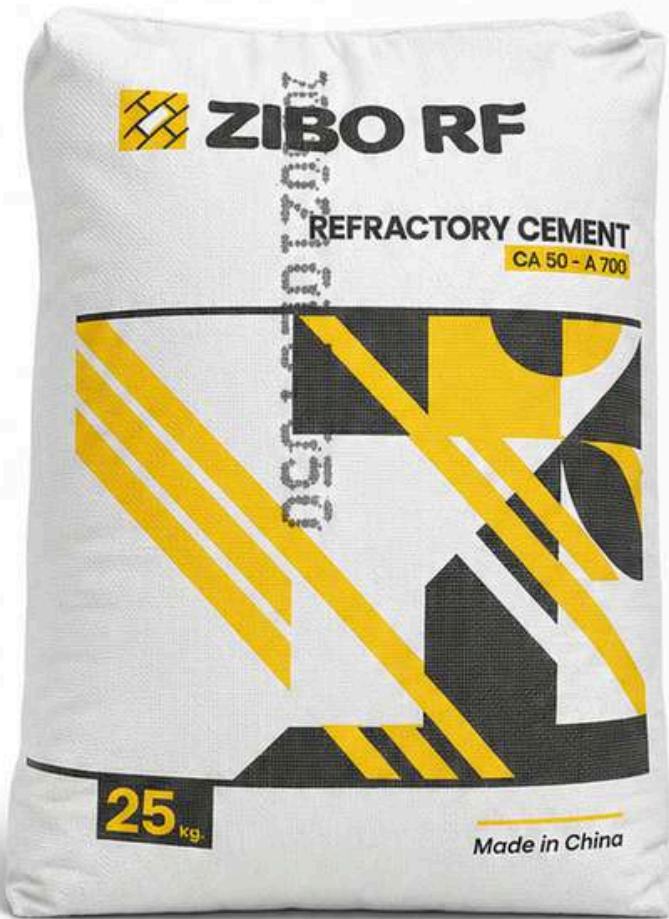
CASTABLE ZRF 60 PRIME

REFRACTORY CASTABLE DATASHEET


ITEM	SPECIFICATION / CONDITION	REFRACTORY CASTABLE ZRF 60 PRIME
 CHEMICAL COMPONENT (%)	Al ₂ O ₃	>60%
	SiO ₂	<35%
	Fe ₂ O ₃	<2.3%
	CaO	<4.5%
 MAX. SERVICE TEMPERATURE	(°C)	1500
 BULK DENSITY	(g/cm ³)	>2.3
 COLD CRUSHING STRENGTH (Mpa)	110°C	>70
	1100°C	>90
	1300°C	>100
 MODULUS OF RUPTURE (Mpa)	110°C	>10
	1100°C	>11
	1300°C	>12
 PERMANENT LINEAR CHANGE (%)	1100°C	-0.1
 TYPE OF INSTALLATION	With water / casting or vibration	
 STORAGE PERIOD (DRY, COOL AND NO FROST)	8-10 month depending on the storage place and climate.	
 PACKAGE	Kraft Paper bag on pallet.	

CASTABLE RF MAX 80

Item	REFRACTORY CASTABLE REFRA MAX 80	
Chemical Analysis (%)	Al ₂ O ₃	>80%
	SiO ₂	<15%
	CaO	<2.5%
	Fe ₂ O ₃	<1.5%
Max Service Temp	(°C)	1750
Bulk Density	g/cm ³	>2.5
Cold Crushing Strength (Mpa)	110°C	>100
	1100°C	>120
Modulus of Rupture (Mpa)	110°C	>13
	1100°C	>14
Permanent Linear Change (%)	1100°C	-0.1
Type of bonding	With water/Trowelling	
Storage Period (dry, cool and no frost)	10-12 month depending on the storage place and climate.	
Package	25kg Paper bag on pallet.	



Refractory Cement CA50-A700

 Imported | China Origin

Refractory Cement CA50-A700 is a high alumina hydraulic cement formulated for high temperature applications. It offers excellent strength development, thermal stability and resistance to chemical attack, making it ideal for refractory castables, mortars, and precast shapes.



HIGH ALUMINA CONTENT
Excellent refractory performance



HIGH TEMPERATURE RESISTANCE
Stable performance under extreme heat



CHEMICAL & WEAR RESISTANCE
Longer life in aggressive environments



PRODUCT APPLICATIONS

Suitable for use in refractory castables, mortar linings, precast shapes, kilns, furnaces, incinerators and other high temperature industrial applications.



KEY BENEFITS

- High alumina content ensures excellent refractoriness
- Good workability and pumpability
- High early and ultimate strength
- Low porosity and high density
- Resistant to thermal shock and spalling
- Reliable performance and consistency



PACKING

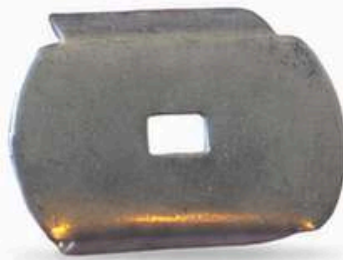
25 kg bag

SPECIFICATIONS

Item	Specification / Condition	Refractory Cement CA50-A700
Chemical Analysis (%)	Al ₂ O ₃	> 50%
Chemical Analysis (%)	SiO ₂	< 8%
Chemical Analysis (%)	Fe ₂ O ₃	< 2%
Chemical Analysis (%)	CaO	> 28%
SSB	M2/KG	> 300
Initial Setting Time	min	> 120
Final Setting Time	min	> 160
Cold Crushing Strength (MPa)	24h	> 60
Cold Crushing Strength (MPa)	72h	> 70
Modulus of Rupture (MPa)	24h	> 6
Modulus of Rupture (MPa)	72h	> 7

INSUL TWIST LOCK

FRONT VIEW



SIDE VIEW



PRODUCT NAME
Insul Twist Lock



MATERIAL
High Quality Steel



APPLICATION
For Insulation Fixing
Systems





GinShiCel MH 336-ALX3

Cellulose Ethers (HPMC / MHPC)



PRODUCT OVERVIEW

GinShiCel MH 336-ALX3 is a non-ionic, water-soluble cellulose ether. It improves the consistency, the stability, and the water retention of water-based products.



SPECIFICATION

GinShiCel MH 336-ALX3 is a high viscosity grade of Hydroxy Propyl Methyl Cellulose, also known as HPMC / MHPC.

PHYSICAL DATA

- | | |
|-------------------------|----------------------------|
| • Appearance | Whitish powder or granules |
| • Particle size | 99% < 250 μm |
| • Methoxyl Content | 19-24% |
| • Hydroxypropyl Content | 4-12% |



CHARACTERISTICS OF AQUEOUS SOLUTIONS

- | | |
|---------------------------|-------------------|
| • pH (2% solution) | Neutral |
| • Viscosity (2% solution) | 55,000-65,000 cps |

KEY PROPERTIES / BENEFITS



Slip resistance



Sag resistance



Extended open time



Low stickiness



Easy workability



TYPICAL APPLICATIONS

- Cement-based tile adhesives
- Cement-based plasters / renders
- Tile & masonry grout
- Repair mortars



PACKAGING & STORAGE

- Packed in multi-layer paper bags with inner polyethylene bag
- Net weight: 25 kg
- In unopened bags, product can last several years
- In opened bags, moisture content can be influenced by air humidity



CAS NUMBER

9004-65-3



ADDITIONAL NOTES

For safe handling, transportation, and storage, please refer to the Safety Data Sheet (SDS).



GinShiCel

Redispersible Polymer Powder (RDP)

Technical Data Sheet Summary

IMPORTED PRODUCT

Redispersible Powder EP55 is a water-dispersible polymer powder based on a copolymer of vinyl acetate and ethylene, using poly(vinyl alcohol) as a protective colloid.

SPECIFICATIONS

Appearance	Free-flowing white powder
Bulk Density	540 ± 40 g/L
Particle Size	Approx. 80 µm
MFFT	Approx. 0°C
Residual Moisture	< 2.5%
pH Value	7.0 ± 1.0
Ash Content	10% ± 2%
Film Properties	Opaque, Elastic
CAS Number	24937-78-8
Net Weight	25 KG

BENEFITS / PROPERTIES

- ✓ Increases flexibility of mortar
- ✓ Improves workability
- ✓ Improves impact resistance
- ✓ Improves fluidity
- ✓ Reduces shrinkage rate and prevents cracking



APPLICATIONS

- Flexible ceramic tile adhesives
- Flexible skim coats
- Embedding mortar for EIFS
- Waterproofing mortars
- SLU and repair mortars
- Floor / wall troweling compounds
- Gypsum applications

PACKAGING & STORAGE

Packed in multi-layer paper bags with an inner polyethylene bag.
Net weight 25 KG.
Store in dry conditions and protect from moisture.

REFRACTORY CEMENT CA-70

IMPORTED PRODUCT

TECHNICAL DATASHEET



High-performance refractory cement for industrial high-temperature applications. Engineered for excellent thermal resistance, high strength development and superior chemical stability.

TECHNICAL SPECIFICATIONS

Chemical Analysis (%)	
Al ₂ O ₃	>70%
SiO ₂	<1.0%
Fe ₂ O ₃	<0.8%
CaO	>25%
SSB (M2/KG)	>500
Initial Setting Time (min)	>130
Final Setting Time (min)	>250
Cold Crushing Strength (MPa)	
24h	>60
72h	>75
Modulus of Rupture (MPa)	
24h	>10
72h	>11
Date	2024/05/29



HIGH REFRACTORINESS

Withstands extreme temperatures



EXCELLENT STRENGTH

High early strength and long-term durability



CHEMICAL RESISTANCE

Superior resistance to corrosion and slag attack



CONSISTENT PERFORMANCE

Reliable quality for industrial applications



ZIRCON FLOUR

Imported • China Origin

Industrial Raw Material



CERTIFICATE OF ANALYSIS



PRODUCT

Zircon Flour

DESCRIPTION

Zircon Flour is a finely milled product to a closely controlled particle size.

TYPICAL PROPERTIES

Property	Range	Value
Zirconia + Hafnia (ZrO ₂ + HfO ₂)	>65%	65.92%
Silica (SiO ₂)	<33%	32.60%
Titania (TiO ₂)	<0.20%	0.11%
Ferric Oxide (Fe ₂ O ₃)	<0.10%	0.08%
Aluminium Oxide (Al ₂ O ₃)	<1.00%	0.66%
Phosphorus Pentoxide (P ₂ O ₅)	<0.30%	0.16%
Moisture	<0.30%	0.10%



Code:
ZF270



Net Weight:
25 KG



Lot No:
ZF270-26W27



Date:
2026.06.24



HIGH PURITY

Consistent quality with controlled composition.



FINE PARTICLE SIZE

Finely milled for optimal industrial performance.



RELIABLE SUPPLY

Stable supply from trusted origin.



REFRACTORY MORTAR

Imported – China Origin

High-quality imported refractory mortar for dependable industrial applications.



TECHNICAL DATA

Al ₂ O ₃ :	>40%
SiO ₂ :	<50%
Fe ₂ O ₃ :	<2.0%
CaO:	<0.8%
Color:	Gray
PACKAGE:	40KG PAIL



INSULATION CASTABLE

— LOCAL CASTABLE —

A high performance insulating castable designed for use in industrial heating applications where low thermal conductivity and thermal stability are required.

TYPICAL CHEMICAL ANALYSIS

COMPONENT	TYPICAL VALUE (%)
Alumina (Al_2O_3)	> 33%
Silica (SiO_2)	< 55%
Calcium Oxide (CaO)	< 10%
Iron Oxide (Fe_2O_3)	< 3%

PHYSICAL PROPERTY

Max Service Temperature ($^{\circ}\text{C}$)	1260
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GOOD THERMAL
INSULATION



RESISTANT TO
THERMAL SHOCK



DURABLE AND
RELIABLE



CONSISTENT
QUALITY



ENGINEERED TO PROTECT.
BUILT TO PERFORM.



INSULATING TODAY FOR A BETTER TOMORROW

HEAD OFFICE



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Office No.610, 6th Floor,
Falak Corporate City,
Talpur road, Serai Quarters,
Karachi.



Email: info.refra@yahoo.com



Email: refrapk@gmail.com



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SUB OFFICE



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03323519555



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