

**Pure Volcanic Value,  
Born From Nature's Depths.**



 **Pumtex**



**Pumtex**

# CONTENTS

1

ABOUT US

2

WHAT SETS US APART?

3

WHY PUMTEX?

4

LABORATORY MEASUREMENTS

5

RESEARCH & DEVELOPMENT

6

AREAS OF APPLICATION

7

TECHNICAL ANALYSIS

8

GALLERY

9

CONTACT



From the ***heart*** of nature,  
to the ***center*** of life.

 **Pumtex**

# ABOUT US

**Koldem A.S.**, established through the partnership of **Kolođlu Holding and the Okçu Brand**, successfully continues its operations in the mining sector under the **Pumtex brand**. Drawing strength from our half-century (50 years) of raw material reserves, we offer sustainability and reliability in the production of high-quality pumice stone and powder, meeting the most stringent quality standards.

We meticulously manage every stage of our high-quality pumice products—characterized by superior physical and chemical properties—from production to supply. In our branding journey extending from local roots to a global presence, we remain committed to redefining industrial standards.

## **The Kolođlu Family: A Global Vision**

The Kolođlu Family began their journey in Elazığ with the founding of Kolsan A.S. in 1976 and Kolin Construction in 1977. Evolving into a national and subsequently global group, they decided to continue their path from their headquarters in Ankara. The national and international successes achieved over time in transportation and infrastructure projects through Kolin Construction, combined with an ever-evolving organizational capability, have been the driving force behind the Group's growth.

## **The Okçu Brand: Deep-Rooted Production Discipline**

The foundations of our company were laid in 1971 with Niğbaş A.S. The production discipline and experience gained during this period were institutionalized over the years, forming the bedrock of our current robust structure. Since the 1970s, our company has been active in the Niğde region, producing ready-mixed concrete infrastructure elements and prefabricated concrete components. We have consistently pioneered the efficient and sustainable utilization of the region's natural resources.

The logo for Pumtex, featuring the word "Pumtex" in a bold, blue, sans-serif font. The letter "P" is stylized with a small, circular graphic element at its base.

# WHAT SETS US APART?

## Expertise in Field, Excellence in Production

With deep-rooted expertise in our core industry and a steadfast commitment to cultivating long-term customer relationships, Pumtex has emerged as a global leader in the production and supply of high-quality ground Pumice.

The quality of our Pumice stands among the best in the world, characterized by exceptional purity levels and superior mineral properties. Backed by our own extensive mining acreage and high-capacity production facilities, we ensure a reliable and continuous supply chain to meet the evolving demands of our global partners.

By placing the "**Quality Excellence**" principle at the heart of our corporate culture, we prioritize creating long-term value for our partners above all commercial objectives. At Pumtex, we continue to set industry benchmarks through sustainable production and a customer-centric service philosophy.

# WHY PUMTEX?

## Global Expertise in Pumice Production

With deep-rooted expertise and a commitment to long-term partnerships, Pumtex is a global leader in high-quality ground Pumice supply.

Characterized by exceptional purity and superior physical properties, our products stand among the best in the world. Our extensive mining acreage and high-capacity facilities ensure a reliable supply chain to meet evolving global demands.

By placing "Absolute Excellence" at our core, we prioritize sustainable value over commercial objectives, setting industry benchmarks through customer-centric service and advanced technology.



# LABORATORY MEASUREMENTS

Our company monitors and records all processes from raw material extraction to final shipment in accordance with the ISO 9001:2015 Quality Management System. Laboratory operations are carried out by expert technical staff using advanced analytical equipment. In our laboratories, physical and chemical analyses of pumice products include:

- **Color Measurement:** Whiteness and brightness are measured with Datacolor Elrepho.
- **Particle Size Analysis:** Granulation and micronization are monitored using Sympatec Helos, Mastersizer Malvern 2000, and Malvern 3000.
- **Moisture Content:** Controlled with precision moisture determination devices.
- **Calcination & Purity Tests:** Performed using drying ovens and muffle furnaces.
- **pH & Sieve Analysis:** Conducted with pH-meters and Retsch AS 200 sieve shaker.

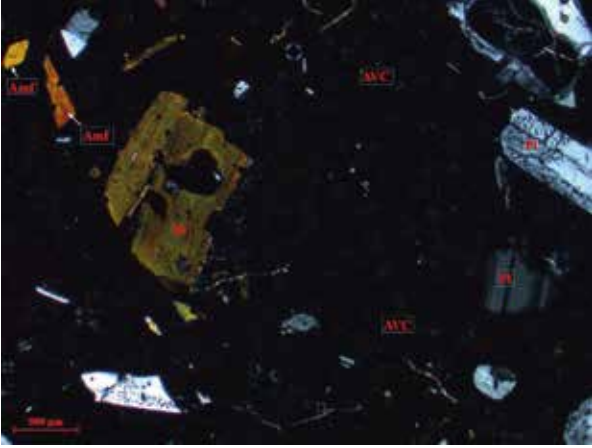
All laboratory equipment is regularly calibrated to ensure accuracy. Approved products are supported by witness samples stored throughout their shelf life, ensuring quality assurance and full traceability. Before packaging, all products undergo final inspection. Packaging options such as Big-Bags and Kraft bags are customized according to customer requirements, with all tracking data recorded for complete traceability.



 **Pumtexas**

### CRYSTALLINE VOLCANIC GLASS (Tuff)

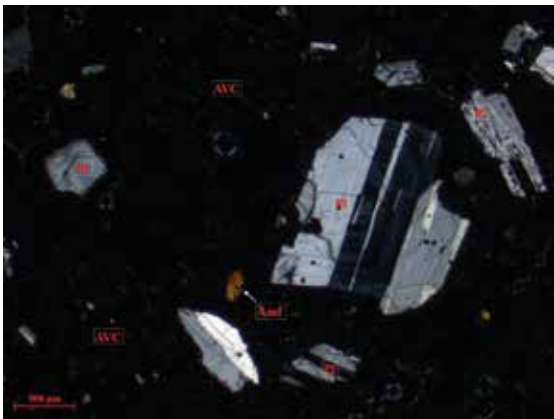
The sample displaying flow texture consists of amorphous–isotropic volcanic glass containing phenocrysts and microphenocrysts. The main component of the volcanic glass is silica ( $\text{SiO}_2$ ). In addition, depending on its composition, it may contain varying proportions of  $\text{Al}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{CaO}$ ,  $\text{Na}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{H}_2\text{O}$ , etc. The phenocrysts and microphenocrysts in this material are generally plagioclase feldspar (often of oligoclase composition, showing zoning and twinning), biotite, amphibole  $\pm$  pyroxene minerals. Locally, honeycomb texture has been observed in plagioclases (Photo 1). In addition, cumulates composed of plagioclase, biotite, and pyroxene minerals are also present in the rock.



**Photo-1:** Polarized light microscope image (crossed nicols) of thin section of sample no. 25/70373. The sample consists of amorphous–isotropic volcanic glass (AVG) containing plagioclase (Pl) phenocrysts together with mafic microphenocrysts such as biotite (Bt) and amphibole (Amf). Locally, honeycomb texture can be observed in plagioclases (upper right).

### CRYSTALLINE VOLCANIC GLASS (Tuff)

The sample consists of amorphous–isotropic volcanic glass, locally displaying flow texture, and the crystals contained within it. The main component of the volcanic glass is silica ( $\text{SiO}_2$ ). In addition, depending on its composition, it may contain variable proportions of  $\text{Al}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{CaO}$ ,  $\text{Na}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{H}_2\text{O}$ , etc. The minerals present in this material include plagioclase feldspar phenocrysts (often of oligoclase composition and locally exhibiting honeycomb texture) and microphenocrysts of amphibole, biotite  $\pm$  pyroxene (Photo 2). Locally, cumulates composed of plagioclase + amphibole + biotite have also been observed.



**Photo-2:** Polarized light microscope image (crossed nicols) of thin section of sample no. 25/70374. The sample consists of amorphous–isotropic volcanic glass (AVG) containing plagioclase (Pl) phenocrysts and mafic microphenocrysts such as amphibole (Amf).

# PUMTEX: PREMIUM PUMICE SOLUTIONS

## The World's Ultimate Quality-to-Price Balance

Pumtex is a "Premium Class" pumice supplier in the global market, distinguished by its high silica purity and optimized amorphous structure. We provide one of the world's highest-performing products, specifically engineered for the textile abrasion (stone wash) industry.

### 1. TECHNICAL SPECIFICATIONS (Average Values)

Our product combines mechanical strength with lightweight properties, thanks to its low LOI values and superior glassy texture.

#### CHEMICAL PROPERTIES (typical) :

<b>SiO<sub>2</sub></b>	: % 71,20	<b>Al<sub>2</sub>O<sub>3</sub></b>	: % 13,60	<b>Fe<sub>2</sub>O<sub>3</sub></b>	: % 2,70
<b>CaO</b>	: % 2,60	<b>MgO</b>	: % 0,70	<b>SO<sub>3</sub></b>	: % 0,05
<b>K<sub>2</sub>O</b>	: % 2,80	<b>Na<sub>2</sub>O</b>	: % 3,10	<b>LOI</b>	: % 2,40



**Pumtex**

## 2. STRATEGIC APPLICATIONS

### TEXTILE (STONE WASH) – Global Score: 5/5

Pumtex is custom-engineered for premium denim washing processes.

Why Pumtex? Perfect abrasion performance, balanced hardness-to-porosity ratio, and ideal flow texture for delicate fabrics.

**Core Markets:** India, Egypt, Bangladesh, Pakistan, Vietnam.

**CONSTRUCTION & INSULATION:** Provides high porosity and lightweight advantages for light concrete and thermal insulation projects.

**Core Markets:** UAE, Saudi Arabia, Qatar, Iraq, Algeria.

**AGRICULTURE & FILTRATION:** High-grade agricultural pumice ideal for specialized soil mixes and filtration media.

**Core Markets:** Italy, Spain, France, Netherlands.

## 3. GLOBAL COMPARISON & MARKET POSITION

Pumtex (Turkey / Niğde-Nevşehir) is the global leader in the quality-price index.

**Premium Grade:** Equivalent to Italian quality standards but offered at a more competitive price point.

**Superior Performance:** Significantly higher durability and purity compared to Chinese or Iranian alternatives.



# RESEARCH & DEVELOPMENT

At Pumtex, we have adopted R&D—the essential requirement for continuous development and enhancement—as our core principle. Research and development activities are integrated into every level of our organization to ensure peak performance, superior quality, and maximum productivity.

**Technical Excellence and Sustainability:** Our technical and professional teams are dedicated to increasing the production capacity of our facilities while simultaneously reducing energy consumption. By optimizing our processes, we deliver high-performance pumice solutions that respect both global resources and your bottom line.

## **Pumice: The Versatile Strength of Industry**

Pumice is an extraordinary natural mineral, increasingly utilized across diverse sectors such as construction, textiles, agriculture, and chemical industries. Because each sector has unique requirements, we tailor our products to meet specific industrial expectations.

## **Innovation Through Collaboration**

To bridge the gap between nature's raw potential and your specific industrial needs, Pumtex conducts its R&D activities in close cooperation with academic teams from leading universities. This synergy of science and industry allows us to provide innovative, high-quality pumice products that set new market standards.



From **nature**  
to the **future...**

 **Pumtex**

# TECHNICAL ANALYSIS

## PMX 15 – 30 mm – TECHNICAL DATA SHEET (TDS)

**Product:** PMX 15 – 30 mm

**Size Range:** 15 – 30 mm

**Origin:** Niğde Volcanic Field – Türkiye

**Geological Classification:** Crystalline Volcanic Glass (Tuff)

**Standard:** ASTM E11 Sieve Classification

### Sieve Analysis (ASTM E11)

Sieve Size (mm)	Passing (%)
• 3.00	• 100
• 2.36	• 85–95
• 1.70	• 55–70
• 1.18	• 20–35
• 0.85	• 0–5



### Chemical Composition (XRF Average)

• SiO <sub>2</sub>	• 71,19%
• Al <sub>2</sub> O <sub>3</sub>	• 13,64%
• Fe <sub>2</sub> O <sub>3</sub>	• 2,66%
• CaO	• 2,55%
• MgO	• 0,68%
• SO <sub>3</sub>	• 0,05%
• K <sub>2</sub> O	• 2,79%
• Na <sub>2</sub> O	• 3,14%
• Calcification Loss	• 2,40%
• Indefinable Content	• 0,90%
• Total	• 100,00%

**Typical Industrial Use:** In textile industry. Surface abrasion and industrial treatment processes.

# PMX 20 - 40 mm – TECHNICAL DATA SHEET (TDS)

**Product:** PMX 20 – 40mm

**Size Range:** 20 – 40mm

**Origin:** Niğde Volcanic Field – Türkiye

**Geological Classification:** Crystalline Volcanic Glass (Tuff)

**Standard:** ASTM E11 Sieve Classification

## Sieve Analysis (ASTM E11)

Sieve Size (mm)	Passing (%)
• 6.00	• 100
• 4.75	• 85–95
• 3.35	• 55–70
• 2.36	• 20–35
• 1.70	• 0–5



## Chemical Composition (XRF Average)

• SiO <sub>2</sub>	• 71,19%
• Al <sub>2</sub> O <sub>3</sub>	• 13,64%
• Fe <sub>2</sub> O <sub>3</sub>	• 2,66%
• CaO	• 2,55%
• MgO	• 0,68%
• SO <sub>3</sub>	• 0,05%
• K <sub>2</sub> O	• 2,79%
• Na <sub>2</sub> O	• 3,14%
• Calcification Loss	• 2,40%
• Indefinable Content	• 0,90%
• Total	• 100,00%

**Typical Industrial Use :** In textile industry. Heavy abrasion effect and special surface treatments.

# PMX 30 - 50 mm - TECHNICAL DATA SHEET (TDS)

**Product:** PMX 30 - 50 mm

**Size Range:** 30 - 50mm

**Origin:** Niğde Volcanic Field - Türkiye

**Geological Classification:** Crystalline Volcanic Glass (Tuff)

**Standard:** ASTM E11 Sieve Classification

## Sieve Analysis (ASTM E11)

Sieve Size (mm)	Passing (%)
• 12.0	• 100
• 9.50	• 85-95
• 6.70	• 55-70
• 4.75	• 20-35
• 3.35	• 0-5



## Chemical Composition (XRF Average)

• SiO <sub>2</sub>	• 71,19%
• Al <sub>2</sub> O <sub>3</sub>	• 13,64%
• Fe <sub>2</sub> O <sub>3</sub>	• 2,66%
• CaO	• 2,55%
• MgO	• 0,68%
• SO <sub>3</sub>	• 0,05%
• K <sub>2</sub> O	• 2,79%
• Na <sub>2</sub> O	• 3,14%
• Calcification Loss	• 2,40%
• Indefinable Content	• 0,90%
• Total	• 100,00%

**Typical Industrial Use:** In textile industry. Landscaping, lightweight construction fill, decorative use.

# GALLERY



Scan the QR code to watch our video.





## CONTACT

**Adres:**

Organize Sanayi Bölgesi Mh. 14 Nolu Yol Cad. No:14 Bor/Niğde

**Phone:**

+90 (388) 502 81 82

**WEB:**

[www.pumtux.com](http://www.pumtux.com)  
[www.koldem.com.tr](http://www.koldem.com.tr)

**Mail:**

[info@pumtux.com](mailto:info@pumtux.com)