JUSHI

High Performance "E6® Enhanced Glass Fiber"
Will Promote the Progress of Composites.



# COMPANY PROFILE



China Jushi specializes in the production of glass fiber. The company has attained the lead[illegible]

Jushi always adheres to its fundamental Management principles:

[illegible]agement to improve efficiency and
• Employ talented people to enable future growth".

The company owns proprietary, world-class core technologies

Classification Society (CCS), DET NORSKE VERITAS (DNV), Lloyd's Register (LR), Germanischer Lloyd (GL) and Attestation De Conformité Sanitaire (ACS).

Jushi produces E-glass and C-glass glass fiber products including rovings, chopped strands, chopped strand mats, woven rovings and electrical yarns and fabrics in over 20 product categories and 1000 specifications. The products are sold in all provinces in China and exported to over 100 countries. The key regions include North America, Middle East, Europe, Southeast Asia and Africa with export accounting for

[illegible]

# GOALS

Enhance Product Performance

Expand Applications

Minimize Environmental Footprint

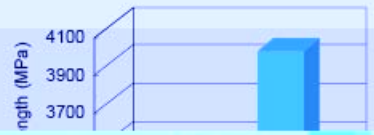
Increase Customer Satisfaction

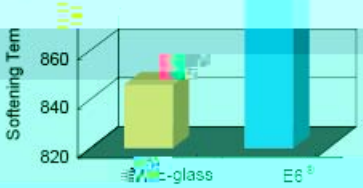
# REVOLUTIONARY NEW GLASS FIBER

## Expands the Scope of Composite Applications

Compared with typical E-glass fiber, Jushi E6® offers the following [illegible]

Property Comparison between E-glass and E6® Fibers

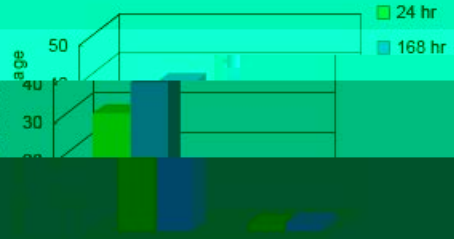



**[illegible] and Electrical Properties of E-glass and E6® Fibers:**

| Property | Testing method | Unit | E | E6® |
|---|---|---|---|---|
| Density | ASTM C693 | g/cm$^3$ | 2.60 | 2.62-2.63 |
| Refractive Index | ASTM C1648 | / | 1.558 | 1.586 |
| Expansion Coefficient | ASTM D696 | $10^{-6}$ K$^{-1}$ | 6.1 | 6.0 |
| Softening Point | ASTM C338 | ℃ | 838 | 898 |
| Elastic Modulus | ASTM E1876 | GPa | 72 | 91 |
| Dielectric Constant (23℃,1MHz) | ASTM D150 | / | 6.7 | 7.1 |

Weight loss comparison of E-glass and E6® fibers soaking in 10% HCl solution at 96℃ after 24 hours and 168 hours




E6® glass fiber is produced with a unique glass formulation, providing significant improvement in chemical corrosion resistance in neutral, acidic or alkaline solutions. The improvement in corrosion resistance is especially significant in the acidic environments

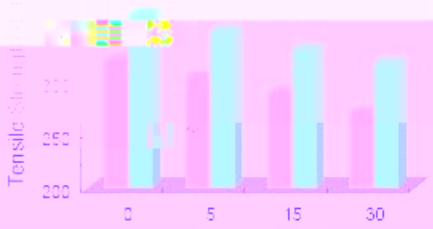
E6® is therefore particularly suitable for the applications in corrosive environments, such as the environmental control devices and chemical, [illegible]

# E6® REINFORCEMENTS

Open A New Era for Composites

## Performance Comparison of Laminates Soaked in Acid Solution

E-glass E6®

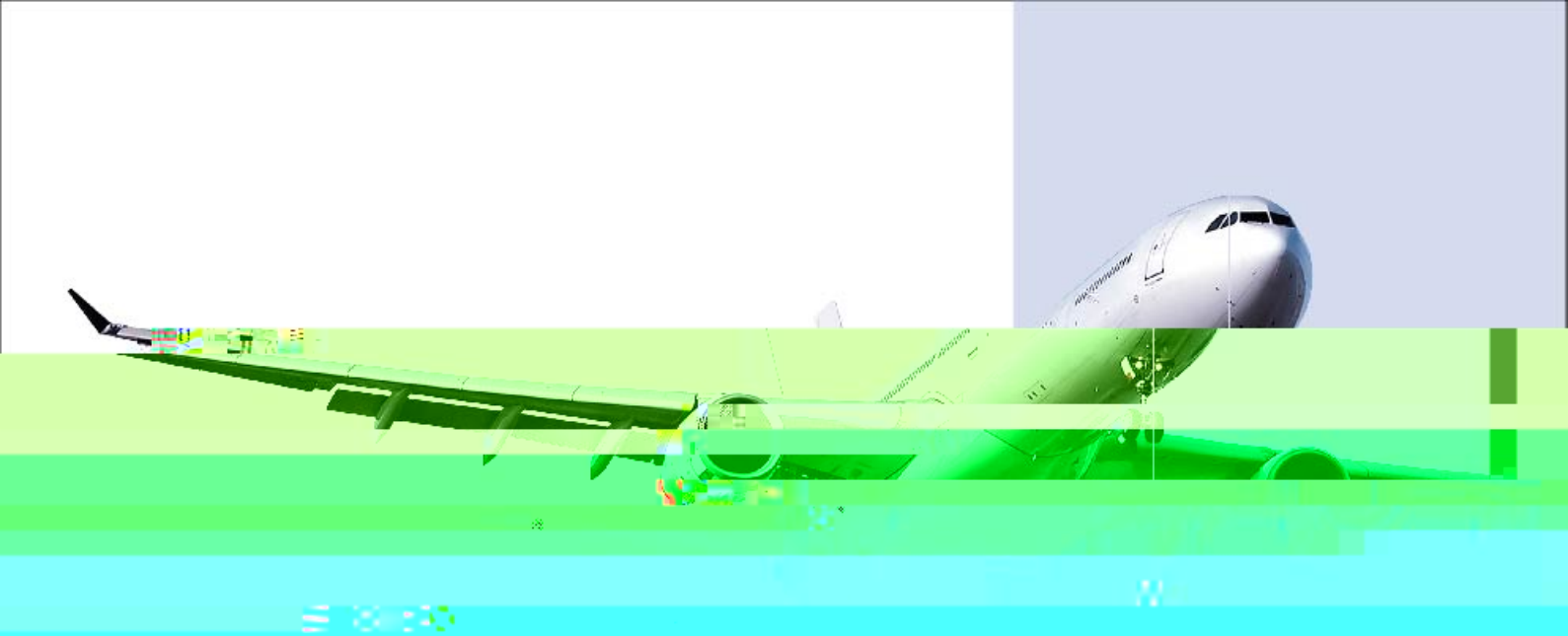



## Superior mechanical properties

The use of E-glass reinforcements allows customers to design high performance composites beyond the limits of the polymer material itself. Jushi E6® glass fiber enables even higher composite performance. Compared with E-glass, composites based on E6® reinforcements have better mechanical properties including: tensile strength, elastic modulus, flexural strength, flexural modulus, shear strength and compressive strength. E6® Enhanced Glass [illegible]

| Test Sample | Property | Standard | E | E6 |
|---|---|---|---|---|
| Tensile strength (MPa) | ISO 527-5 | | | H120 6 |
| Tensile modulus | | | | |





**E6® Enhanced Glass Fiber** reinforced composite materials offer better corrosion resistance and temperature endurance, making composite p

Compared with E-glass fiber,

Glass fiber reinforced

as pipes used in oil field progression or in treatment of hig

such

| | | | |
|---|---|---|---|
| | GB/T 1449 | 13.2% | 2.6% |

| | | | |
|---|---|---|---|
| Hand laid laminates | Flexural strength (MPa) | GB/T 1449 | 19.2 |
| | Flexural modulus (GPa) | GB/T 1449 | 14.3% |



# ENVIRONMENTAL PROTECTION

## Become a Model for Clean Production

## CUSTOMER AND TECHNICAL SUPPORT ORGANIZATION



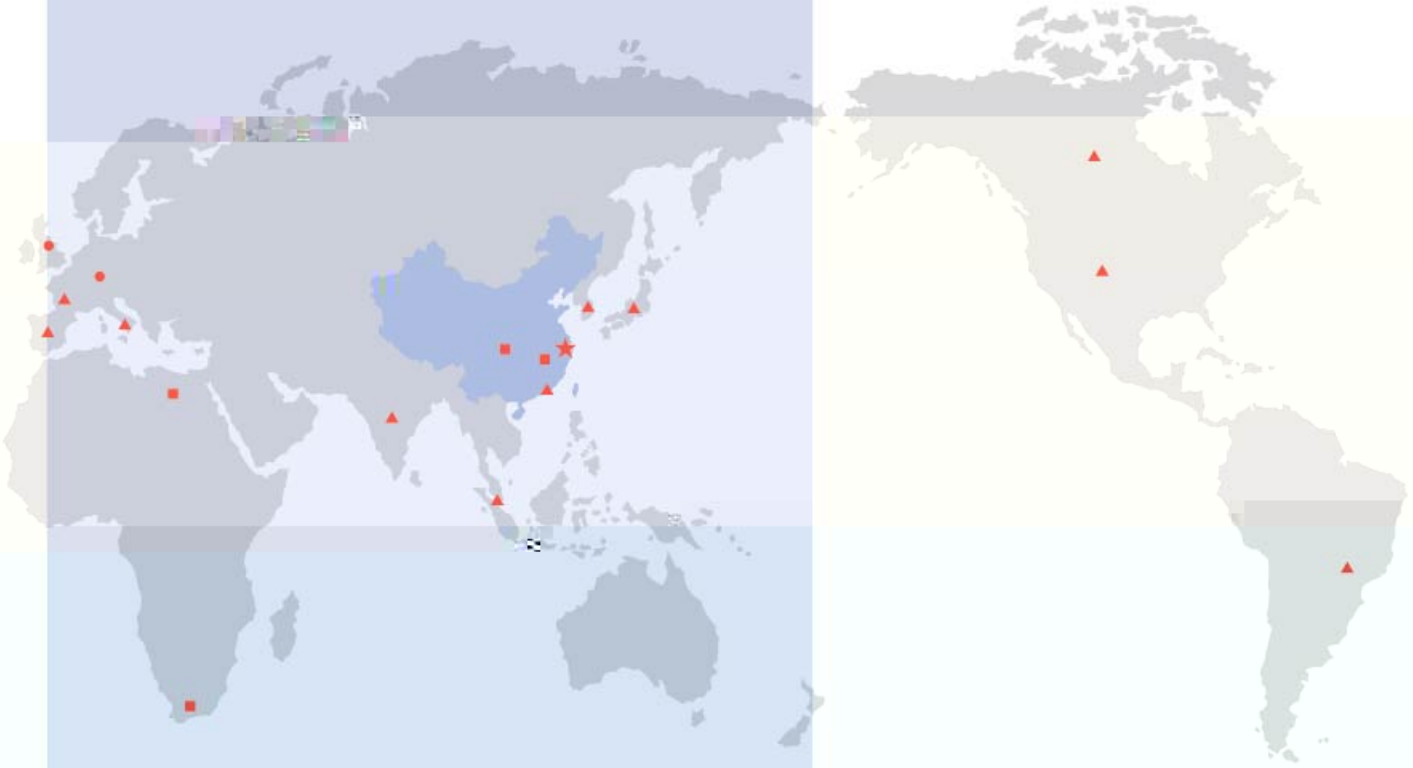

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★All the data given in this brochure is preliminary and China Jushi reserves the right to update or modify the data without notice.




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