

# Technical Data Sheet

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Durafil Water Soluble Yarn

20°C Soluble | Ne 40/1

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## 1. Product Description

Water soluble yarn is a PVA-based yarn engineered to dissolve in water under controlled conditions.

This product is designed for use as a temporary process yarn in weaving and knitting applications where support, stabilization, or structure is required during processing and removal is required after.

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## 2. Key Characteristics

- Dissolves in water at approximately 20°C and above
- Suitable for low-temperature removal processes
- Designed for temporary structural support
- Compatible with delicate and superfine fibre systems
- Leaves no residue when fully dissolved under appropriate conditions

### 3. Typical Applications

- Support yarn in weaving of superfine fibres (cashmere, alpaca, fine wool)
  - Knitting stabilization and loop support
  - Lace and open structure base systems
  - Temporary reinforcement of fragile yarn systems
  - Pattern formation through removable structures
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### 4. Physical Properties (Typical Values)

Property	Typical Value
Yarn Count	Ne 40/1
Material	Polyvinyl Alcohol (PVA)
Appearance	White / off-white
Construction	Spun yarn
Solubility Temperature	~20°C (water)
Moisture Sensitivity	High (before use)

## 5. Solubility Behaviour

- Begins dissolving at approximately 20°C in water
  - Dissolution rate depends on:
    - Water temperature
    - Liquor ratio
    - Movement/agitation
    - Fabric structure
  - Complete dissolution requires adequate exposure to water and process conditions
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## 6. Processing Guidelines

For reliable performance:

- Maintain dry conditions before use
- Avoid exposure to humidity prior to processing
- Ensure sufficient water volume during removal
- Ensure adequate wash time and movement
- Confirm complete dissolution before drying

## 7. Limitations

- Sensitive to moisture before intended use
  - Requires controlled dissolution conditions
  - May leave residue if process conditions are insufficient
  - Performance depends on fabric structure and accessibility
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## 8. Storage and Handling

- Store in a cool, dry environment
  - Keep in original packaging until use
  - Avoid exposure to high humidity
  - Minimize handling after opening
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## 9. Testing and Validation

Performance must be validated under actual production conditions.

Recommended:

- Conduct small-scale trials
  - Verify dissolution under process conditions
  - Adjust process parameters as required
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## 10. Safety and Environmental Notes

- Water soluble material
  - Disposal depends on local regulations
  - Refer to Safety Data Sheet (SDS) for detailed information
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## 11. Responsibility

Final performance depends on process conditions and system control.

Users are responsible for testing, process adjustment, and validation before production.

## 12. Disclaimer

All data provided are typical values and guidance only.

Performance depends on application, process conditions, and system design.

Validation under actual production conditions is required.

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## 11. Contact for Technical Support

For technical queries:

Email: [info@durafil-group.com](mailto:info@durafil-group.com)