EDOBURG

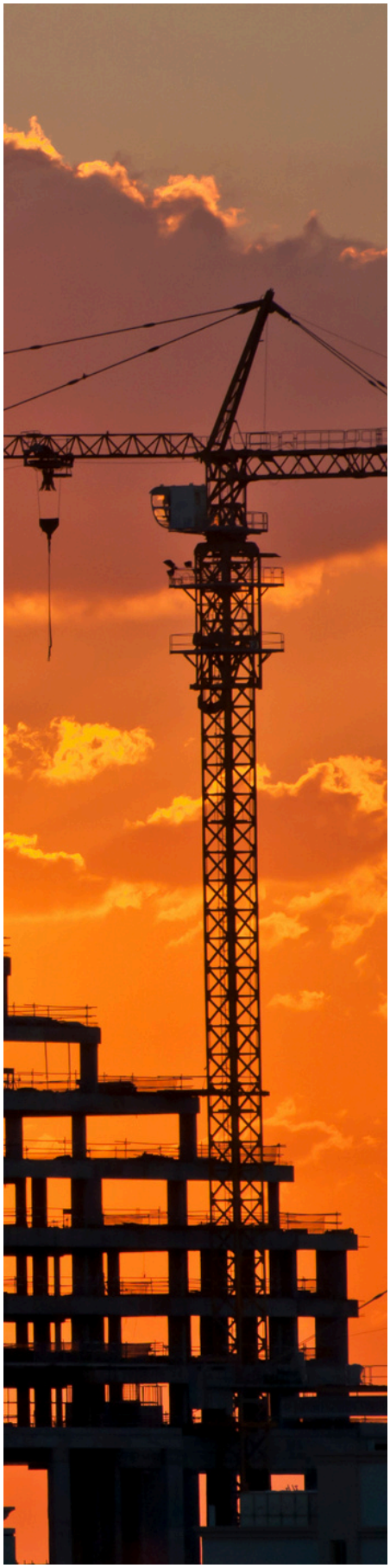
GLOBAL CATALOGUE

# PEX Piping Systems

Australia & New Zealand - AS/NZS 2492

# About Edoburg

Edoburg is a structured, multi-category global supplier of certified infrastructure materials, serving contractors, distributors, and institutional buyers across regulated global markets. A division of ***Edoburg Downes Pvt. Ltd.***, the company operates with a clear focus on tested quality, export compliance, and long-term delivery consistency.



Our product portfolio spans over 10,000 SKUs across a wide range of categories including plastic piping systems, thermoplastic and composite pipelines, metal pipes and sections, drainage and utility systems, industrial components, and specialized engineered solutions for global projects.

All Edoburg-supplied products are manufactured in audited facilities and conform to international standards such as ASTM, CSA, ISO, IS, AS/NZS, and EN, depending on the target market. Each order is backed by full documentation support — including batch test reports, packing lists, Certificates of Origin, and private labelling when required.

We operate with export-ready processes, offering mixed container loads, low or no minimum order quantity, and market-specific packaging and compliance labelling. Our systems are designed to meet the expectations of professional buyers who require traceability, repeatability, and standardization across multiple geographies.

With clients across North America, Europe, the Middle East, Africa, and Asia-Pacific, Edoburg is positioned as a dependable global supplier — combining technical competence with structured commercial execution.

We don't just deliver material. **We supply what builds**.



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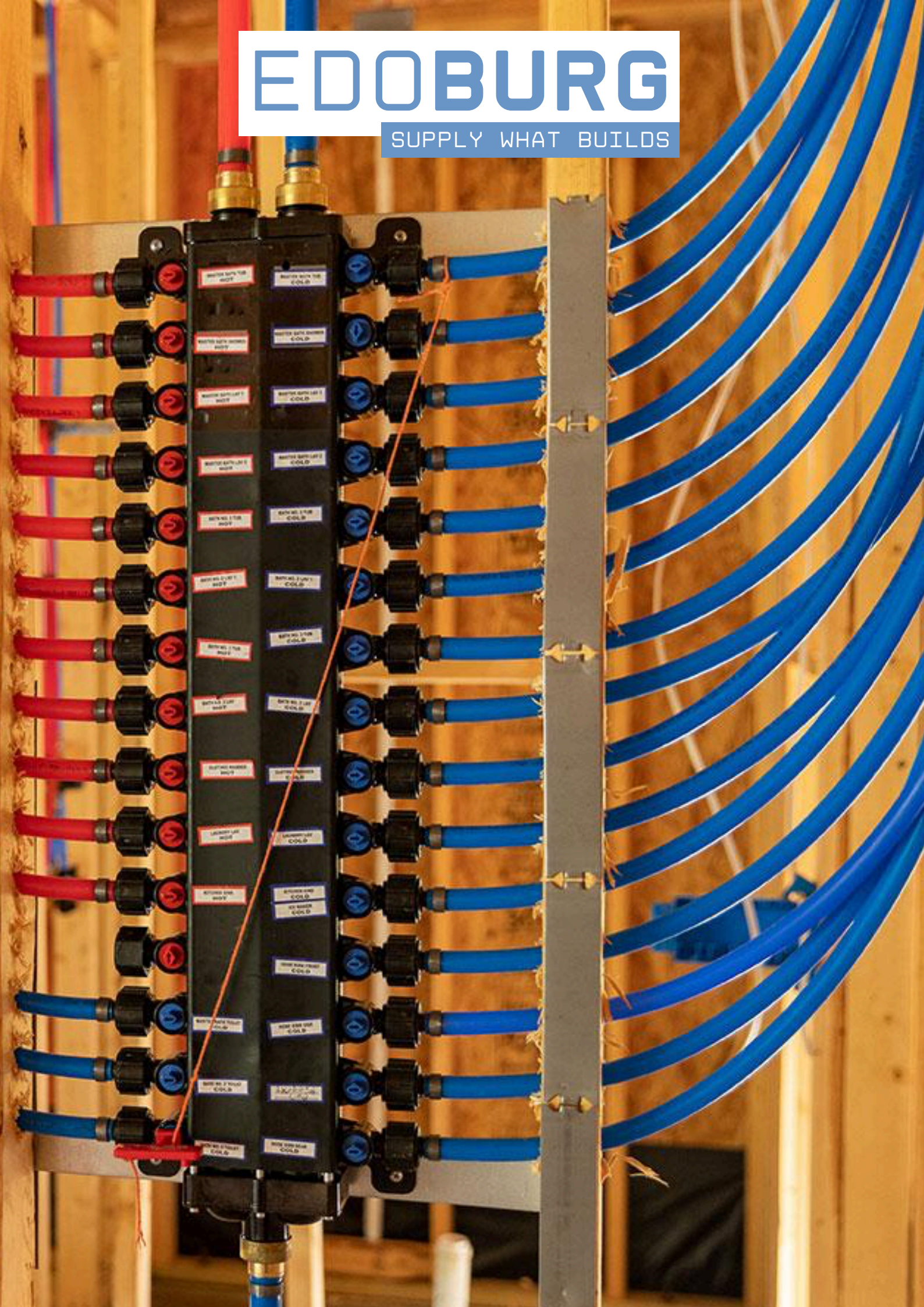
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# Technical & Properties Sheet

## PEX Piping Systems – AS/NZS 2492

Manufacturing Origin: China

## Material & Construction

- Material families:
  PEX-a (peroxide/Engel crosslinking)
  PEX-b (silane/moisture-cure crosslinking)
- Barrier variants: PEX-a EVOH / PEX-b EVOH — multi-layer with co-extruded EVOH oxygen barrier(bonding tie-layers); barrier location per product drawing.
- Form: Coils and straight lengths; colour coding per product line.
- Crosslinking: Degree of crosslinking per standard requirements (method reference in type tests).

## Applicable Standards & Key Test Methods

- Pipe: AS/NZS 2492 (dimensions, materials, performance, marking, pressure classification).
- Fittings: AS/NZS 2537 (press/crimp mechanical joint fittings).
- Oxygen barrier (EVOH): DIN 4726 oxygen diffusion performance (closed-loop heating).
- Typical referenced test methods in type/lot testing (as applicable):
  Long-term hydrostatic strength: ISO 1167 series
  Thermal stability (OIT): ISO 11357-6
  Heat reversion: ISO 2505
  Degree of crosslinking: ISO 10147
  Dimensions & tolerances: per AS/NZS 2492
  Joint performance with fittings: per AS/NZS 2537

## Dimensional Series & SDR (metric OD)

- Series: Metric OD per AS/NZS 2492
- Common SDRs: SDR 9 and SDR 7.4
- Typical size set (mm): 16, 20, 25, 32

| OD (mm) | SDR 9 Wall e (mm) | SDR 9 ID (mm) | SDR 7.4 Wall e (mm) | SDR 7.4 ID (mm) |
|---|---|---|---|---|
| 16 | 1.78 | 12.44 | 2.16 | 11.68 |
| 20 | 2.22 | 15.56 | 2.7 | 14.6 |
| 25 | 2.78 | 19.44 | 3.38 | 18.24 |
| 32 | 3.56 | 24.88 | 4.32 | 23.36 |

# Physical & Mechanical Properties

Values below are typical at -23 °C for commercial PE-X compounds and are provided for engineering guidance. Actual values depend on compound and dimension; acceptance is per AS/NZS 2492 and WaterMark scope. EVOH barrier does not change base PE-X mechanicals.

## Material Specification

- Material: Cross-linked polyethylene (PE-X) — PEX-a or PEX-b
- Colour options: Natural, red, blue (others on request)
- Form: Coils and straight lengths (sizes per AU size page)
- Jointing: Press/crimp fittings to AS/NZS 2537

| Property | Unit | PEX-a | PEX-b |
|---|---|---|---|
| Density | g/cm$^3$ | 0.94–0.95 | 0.94–0.95 |
| Tensile strength (approx. yield) | MPa | 20–27 | 20–27 |
| Elongation at yield | % | ~10 | ~10 |
| Elongation at break | % | ⩾200 (often 300–500) | ⩾200 (often 250–400) |
| Tensile modulus (secant) | MPa | 550–700 | 550–700 |
| Impact strength (Charpy, un-notched) | — | No break | No break |
| Notched impact strength (Charpy) | kJ/m$^2$ | 8–12 | 8–12 |
| Shore hardness | D | 55–60 | 55–60 |
| Ball indentation hardness | MPa | 35–45 | 35–45 |
| Mean coeff. of linear thermal expansion (α) | K$^{-1}$ | (1.5–2.0)×10$^{-4}$ | (1.5–2.0)×10$^{-4}$ |
| Thermal conductivity | W/(m·K) | ~0.35 | ~0.35 |
| Dielectric strength | kV/mm | 25–35 | 25–35 |
| Surface resistivity | Ω | ⩾1×10$^{15}$ | ⩾1×10$^{15}$ |
| Combustibility | — | Combustible thermoplastic | Combustible thermoplastic |
| Physiologically safe | — | Yes* | Yes* |
| Chemical resistance | — | Good vs. water/glycols; check media | Good vs. water/glycols; check media |
| Recommended service temperature** | °C | 0…95 (application-dependent) | 0…95 (application-dependent) |

* Potable use in AU only where WaterMark applies.
** Observe temperature/pressure limits and product marking per AS/NZS 2492; hydronic operation per installer design with appropriate derating.



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# Physical & Mechanical Properties

(typical at 23 °C unless noted)

| Property | Unit | Value |
|---|---|---|
| Water absorption | % | 0.03 |
| Humidity absorption | % | 0.015 |
| Melting temperature (10 °C/min) | °C | 169 |
| Glass transition (10 °C/min) | °C | −40 |
| HDT @ 1.8 MPa | °C | 104 |
| Vicat softening (method B) | °C | 138 |
| Combustibility | — | UL 94 V-0 (tested 1.6 mm & 0.8 mm) |
| Oxygen index | % | 83 (per supplied data) |
| Physiologically safe | — | Yes; high-purity grades for FDA/USDA/USP VI on request |
| Chemical resistance | — | Excellent vs. most inorganic acids, salts, halogens, alcohols; limited vs. strong bases/alkali metals; check medium/temperature |
| Temperature range (service) | °C | ~ −20 to +140 (application-dependent; derate per ISO 10931/ supplier curves) |

Processing/physical (from your data): MVR (230 °C/5 kg) 1.1 $cm^3$/10 min (ISO 1133). Molding shrinkage: 2.0 % parallel / 2.0 % normal (ISO 294-4/2577).

*Notes: Items marked typical industry value were not on your source page; they're widely referenced guide values to complete your spec. Keep them as guidance only or replace with your lab data.*

# PEX-a Pipes – AS/NZS 2492

Standard: AS/NZS 2492

Certification:

WaterMark

## PEX-a Pipes – AS/NZS 2492

| Spec. | Length (m) | | Color |
|---|---|---|---|
| | Roll | Straight | |
| 16x2.2 | 200/500 | 4m | Blue/Red/White/Purple |
| 20x2.8 | 100/200 | 4m | Blue/Red/White/Purple |
| 25x3.5 | 50/100 | 4m | Blue/Red/White/Purple |
| 32x4.4 | 50/100 | 4m | Blue/Red/White/Purple |

## EVOH PEX-a Pipes – AS/NZS 2492

| Spec. | Length (m) | | Color |
|---|---|---|---|
| | Roll | Straight | |
| 16x2.2 | 200/500 | 4m | Blue/Red/White/Purple |
| 20x2.8 | 100/200 | 4m | Blue/Red/White/Purple |
| 25x3.5 | 50/100 | 4m | Blue/Red/White/Purple |
| 32x4.4 | 50/100 | 4m | Blue/Red/White/Purple |

# PEX-b Pipes – AS/NZS 2492

Standard: AS/NZS 2492

Certification:

WaterMark

## PEX-b Pipes – AS/NZS 2492

| Spec. | Length (m) | | Color |
|---|---|---|---|
| | Roll | Straight | |
| 16x2.2 | 200/500 | 4m | Blue/Red/White/Purple |
| 20x2.8 | 100/200 | 4m | Blue/Red/White/Purple |
| 25x3.5 | 50/100 | 4m | Blue/Red/White/Purple |
| 32x4.4 | 50/100 | 4m | Blue/Red/White/Purple |

## EVOH PEX-b Pipes – AS/NZS 2492

| Spec. | Length (m) | | Color |
|---|---|---|---|
| | Roll | Straight | |
| 16x2.2 | 200/500 | 4m | Blue/Red/White/Purple |
| 20x2.8 | 100/200 | 4m | Blue/Red/White/Purple |
| 25x3.5 | 50/100 | 4m | Blue/Red/White/Purple |
| 32x4.4 | 50/100 | 4m | Blue/Red/White/Purple |

# Storage, Handling & Transportation

(Applicable to PEX-a, PEX-b, and EVOH oxygen-barrier variants)

## Storage

- Environment: Dry, clean, shaded; avoid ozone sources (motors, welders), solvents, open flame, and radiant heat.
- Temperature conditioning: Keep between +5 °C and +40 °C for storage; if product has been below +5 °C, allow 12–24 h at room temperature before uncoiling.
- UV exposure: Store under cover; if outdoor staging is unavoidable, use opaque tarps with air gaps. (Follow product label for any time limits.)
- Stacking (coils): Keep pallets level; "eye-to-sky"; do not cantilever. Max 2 pallets high unless packaging says otherwise.
- Racking (sticks): Full-length support at ⩽1.5 m spacing; end caps on; no point loads.
- Segregation: Keep EVOH coils separate; avoid sharp edges or abrasive contact that could scuff the barrier.

## Handling

- Lifting: Move palletized product only; use fork tines long enough to fully support the pallet width; no hooks through coil eyes.
- Uncoiling (recommended): Use an uncoiler. If manual, lay coil flat, cut ties one at a time, pull from the center, rotate coil as pipe pays out.
- Bending: Respect minimum cold bend radius (use the more conservative of your product spec or ⩾8 × OD). Do not bend within 8 × OD of a fitting.
- Kinks:
  - PEX-a: Limited heat-memory repair is possible with a controlled hot-air gun (no open flame) per product instructions.
  - PEX-b: Cut out kinked section and couple—do not heat-repair.
- Cleanliness: Keep ends capped until jointing; prevent dirt, grit, or moisture from entering.
- Abrasion/impact: Use corner/edge protectors where strapping touches; do not drag across concrete, steel, or scaffolding.

## Transportation

- Palletization: Ship in original packaging; shrink-wrap intact; corner boards on coil pallets.
- Load securement: Use wide fabric straps with corner protectors; tighten to prevent movement without deforming the pipe.
- Orientation: Coils vertical ("eye-to-sky"); sticks fully supported—no overhang beyond tray/racks.
- Cover: Protect from sun, road grime, and exhaust heat; maintain airflow under tarps to avoid heat build-up.
- Mixed loads: Separate from solvents, fuels, adhesives, or chemicals that could attack polymers or the EVOH layer.

## EVOH Oxygen-Barrier — special care

- Do not sand, scrape, or score the barrier surface.
- Avoid adhesive tapes directly on the barrier layer; use low-tack film or banding over protective wrap.
- If barrier is visibly breached, treat as damaged: cut back to sound material.

## Quick DO / DON'T

- DO: store under cover; keep ends capped; use uncoilers; protect edges; follow bend radii.
- DON'T: expose to prolonged UV; stack unevenly; strap too tightly; heat with open flame; attempt kink heat-repair on PEX-b; drag coils/sticks over abrasive surfaces.

Note: Numerical limits above are conservative best practice for thermoplastic pressure pipe. Where your product sheet specifies different values (e.g., tighter bend radius, permitted pallet stacks, UV limits), the product sheet governs.

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