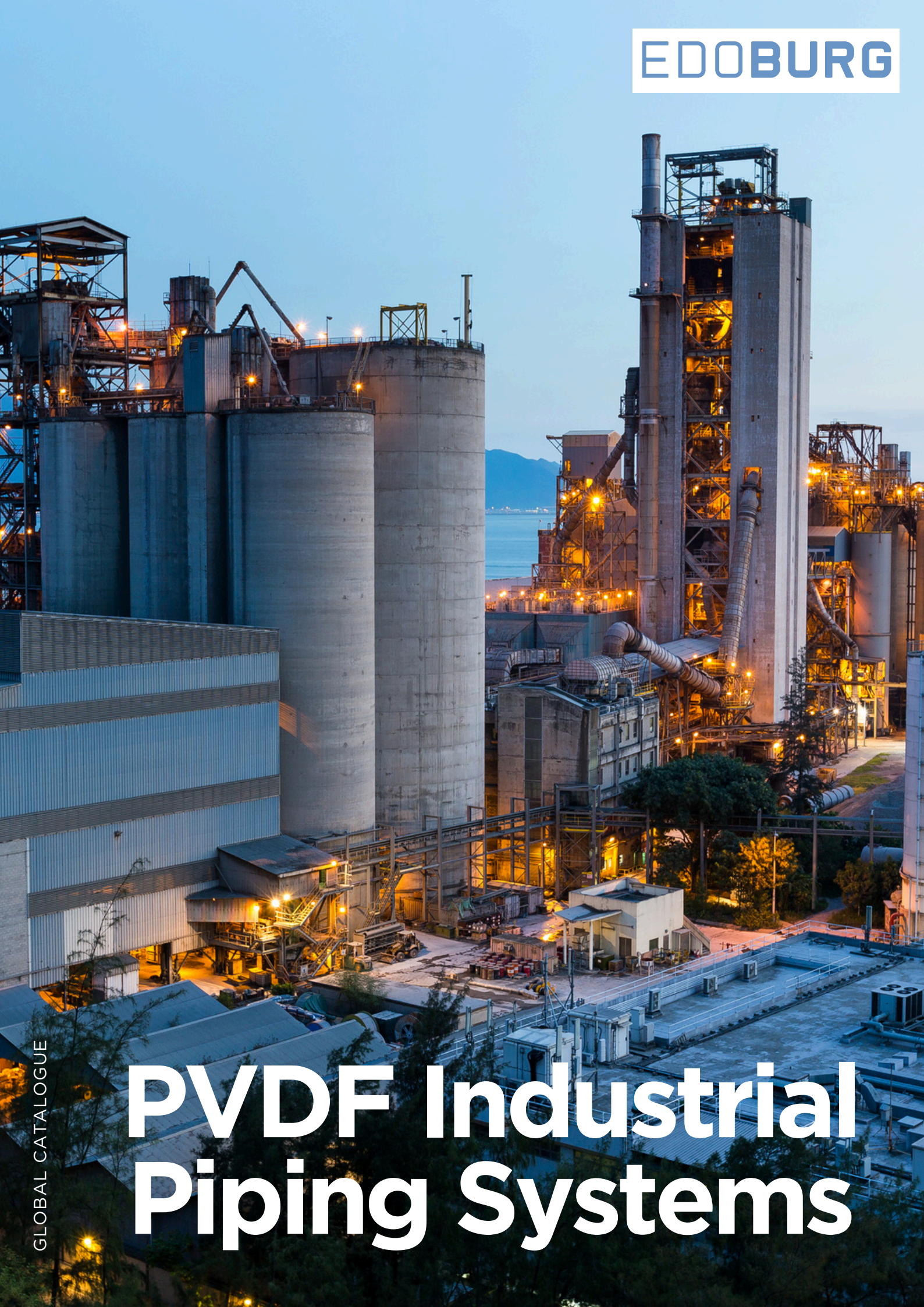


EDOBURG



GLOBAL CATALOGUE

PVDF Industrial Piping Systems

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.

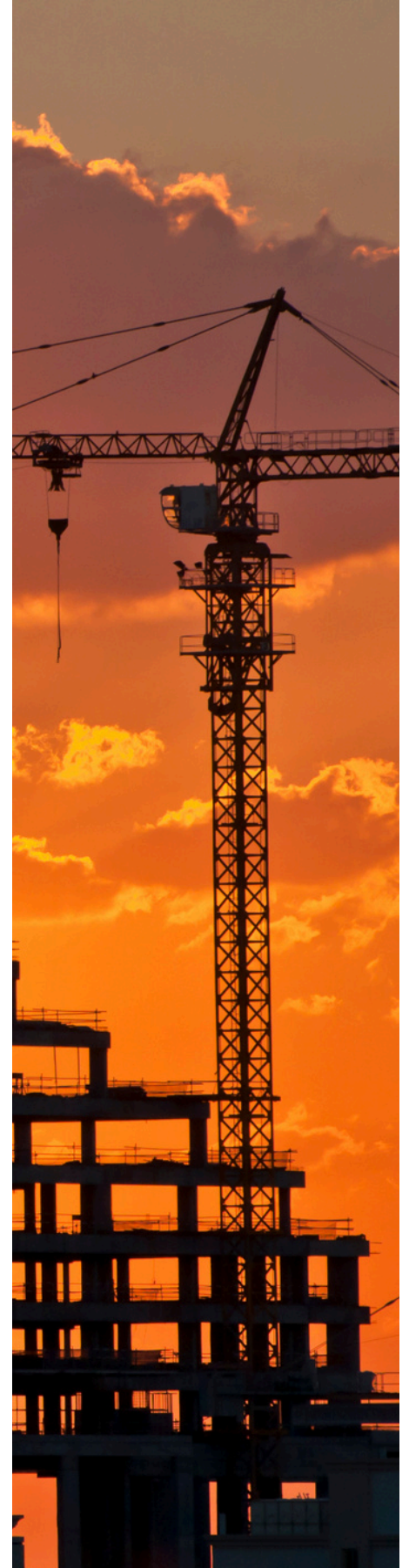
Our product portfolio spans over 10,000 SKUs across a wide range of categories including plastic piping systems, thermoplastic and composite pipelines, metal pipes and sections, drainage and utility systems, industrial components, and specialized engineered solutions for global projects.

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.**



EDOBURG

SUPPLY WHAT BUILDS



Technical & Properties Sheet

PVDF Industrial Piping Systems — ISO 10931

Manufacturing Origin: India

Material specification

- Material: PVDF, virgin homopolymer; very pure (no added plasticizers/stabilizers).
- Color/form: Natural (translucent/transparent grades available); light/UV/heat-stabilized variants available.
- Manufacture & jointing: Pipes and fittings suitable for butt fusion, socket fusion, electrofusion; easily machined and fabricated; high-quality welded joints for secure, leak-tight systems.
- Applications: Corrosion-protection in chemical industry; offshore; wire & cable; high-purity/UPW; ventilation/duct; process transfer.

Standards & guidelines (design/quality/test)

- Material/system (design & installation): ISO 10931; EN ISO 15494 (general industrial thermoplastic piping reference).
- Material designation: ASTM D3222 (PVDF resin).
- Combustibility: UL 94 (V-0 reported below).
- Drawing & documentation (project deliverables): ISO 128/129/7200 (when applicable).
- Test methods as listed in your data: ISO 1133, ISO 294-4/2577, ISO 527, ISO 179/1eU, ISO 11357, ISO 75, ISO 306, ISO 11359, IEC 60695-11-10, ISO 4589, IEC 62631 (2-1, 3-1, 3-2), IEC 60243-1, IEC 60112, ISO 62, ISO 1183.

Key advantages (PVDF)

- High mechanical strength & toughness; very low creep; high abrasion resistance.
- High dielectric strength; low permeability to most gases/liquids.
- Low flame/smoke, UL 94 V-0; high oxygen index (per data).
- Exceptional chemical resistance; resistant to fungi; radiation-resistant (nuclear).
- UV/weather resistant; smooth inner surface; high barrier properties; long service life in corrosive duty.
- Readily melt-processable; easily machined & fabricated; transparent grades available.
- High purity options (FDA/USDA/USP Class VI available on request).

Compliance & approvals

- Fire: Meets UL 94 V-0 at stated thicknesses; low flame/smoke characteristics.
- Hygiene/purity: PVDF is physiologically inert; FDA/USDA/USP Class VI-compliant grades available on request (list grade on submittals).
- UV/weather: UV-resistant and abrasion-resistant variants available.
- Radiation: PVDF exhibits resistance to nuclear radiation; confirm dose & environment with Edoburg engineering.

Physical & Mechanical Properties

(typical at 23 °C unless noted)

Property	Unit	Value
Density	g/cm ³	1.770 (1770 kg/m ³)
Yield stress	MPa	50
Elongation at yield	%	9
Elongation at break (nominal)	%	> 50
Tensile modulus	MPa	2000
Impact strength (Charpy, un-notched, +23 °C)	kJ/m ²	No break
Impact strength (Charpy, un-notched, -30 °C)	kJ/m ²	No break
Notched impact (Charpy, +23 °C)	kJ/m ²	22
Notched impact (Charpy, -30 °C)	kJ/m ²	5
Ball indentation hardness	MPa	~95 (typical industry value)
Shore hardness	D	~75-78 (typical industry value)
Mean coefficient of linear thermal expansion	K ⁻¹	150 × 10 ⁻⁶
Thermal conductivity	W/(m·K)	~0.20 (typical industry value)
Dielectric strength	kV/mm	27
Surface resistivity	Ω	4 × 10 ¹³
Relative permittivity (100 Hz / 1 MHz)	—	10.5 / 7
Dissipation factor (100 Hz / 1 Hz)	—	2.7 × 10 ⁻² / 2.4 × 10 ⁻¹

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 cm³/10 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.

Dimension of PVDF Pipe

Size (inch)	OD (mm)	Wall (PN10 / 10 kg/cm ²)	Wall (PN16 / 16 kg/cm ²)
½"	20	—	1.9
¾"	25	—	1.9
1"	32	—	2.4
1¼"	40	—	2.4
1½"	50	—	3
2"	63	2	3
2½"	75	2.3	3.6
3"	90	2.8	4.3
4"	110	3.4	5.3
6"	160	4.9	7.7

Notes:

- PN10/PN16 thicknesses correspond to the 10/16 kg/cm² sets you supplied. If you'd like, I can compute and add SDR, ID, and kg/m columns (using $\rho = 1.77 \text{ g/cm}^3$) for the catalogue.
- Where PN10 values weren't provided for small sizes, I've left them blank intentionally rather than guess.



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