

Photograph: finished sheets, Xin Longdi workshop

XIN LONGDI · ENGINEERING PLASTIC SHEET

PPH Sheet

Product overview & selection guide

> Product overview and material selection guide. Not a certified technical data sheet. Company data and reference values are labelled separately throughout.

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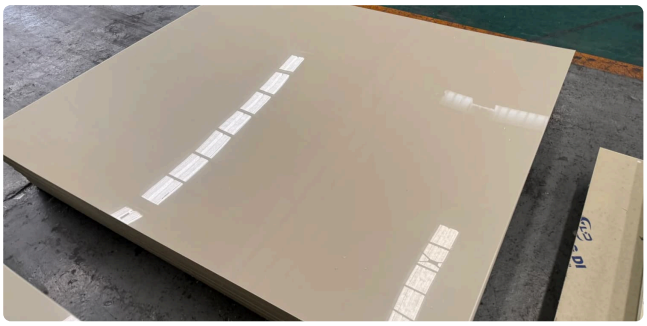
01 · PRODUCT

PPH sheet, extruded in-house

Xin Longdi extrudes PPH sheet in its own plant in Zibo, Shandong, and cuts, machines and welds it in the same workshop. The sheet is used for chemical tanks, scrubbers, process equipment and fabricated parts after an application review.



Sheet extrusion line, roller detail · Xin Longdi



Finished sheet surface · Xin Longdi workshop

Supply data

A · Company data

Production	In-house extrusion in Zibo, Shandong; manufacturer since 2018
PP / PPH naming	Xin Longdi uses “PP sheet” and “PPH sheet” for the same sheet product. PPH is the industry designation for homopolymer polypropylene (PP-H); the actual resin type and commercial grade are confirmed for each order
Thickness	3–40 mm routine; thicker sheet for large-volume orders after technical confirmation
Width	Up to 3.6 m production width
Length	Continuously extruded and cut to length for the order
Colours	Beige grey, light grey, dark grey and white, subject to production and stock; custom colours on request
Surface	Smooth on both sides as standard; special surfaces assessed for custom orders
Supply formats	Full sheets, cut-to-size blanks, CNC-machined parts and welded assemblies
Packing	Protective film available; pallet or project-specific packing to order
Documents	Raw-material TDS, product data and test reports only as actually available and agreed for the order

From Xin Longdi's production and supply records. Tolerances, grade documents, minimum order and lead time are confirmed for each order.

How this document labels information

A · Company data From Xin Longdi production and supply records. Not laboratory test results.

B · Reference Published guideline values of named third-party grades, with source and method. Not Xin Longdi data, not typical, minimum or guaranteed values.

C · Per order Confirmed in writing for each order: tolerances, grade documents, minimum order, lead time, media and temperature suitability.

02 · REFERENCE PROPERTIES

Reference properties: how PP-H differs from PP-B

Polypropylene types differ mainly in stiffness, heat resistance and low-temperature impact. The table quotes published guideline values for two named Röchling grades to show that difference.

Reference values · not Xin Longdi data. Published guideline values for two named Röchling grades, quoted to show how PP-H and PP-B differ. Xin Longdi has not tested its sheet to these methods. They are not typical, minimum or guaranteed values for Xin Longdi products. Röchling states these are average values per DIN EN 15860, for information only and not binding.

Property	PP-H reference	PP-B reference	Unit	Test method
Density	**> 0.90**	**> 0.91**	g/cm³	DIN EN ISO 1183-1
Yield stress	**> 30**	**> 23**	MPa	DIN EN ISO 527
Elongation at break	**> 50**	**> 50**	%	DIN EN ISO 527
Tensile modulus	**> 1500**	**> 1100**	MPa	DIN EN ISO 527
Notched impact strength (Charpy)	**> 6**	**> 30**	kJ/m²	DIN EN ISO 179
Shore hardness	**> 70**	**> 65**	Shore D	DIN EN ISO 868
Melting temperature	**162 … 167**	**162 … 165**	°C	ISO 11357-3
Vicat softening temperature (B)	**90**	**85**	°C	DIN EN ISO 306, Vicat B
Service temperature, long term	**0 … 100**	**–30 … 100**	°C	Average
Service temperature, short term (max.)	**150**	**150**	°C	Average
Linear thermal expansion	**120 … 190**	**120 … 190**	10^{-6}/K	DIN 53752
Thermal conductivity	**0.20**	**0.20**	W/(m·K)	DIN 52612-1
Flammability	**HB**	**HB**	—	UL 94 (3 mm / 6 mm)

Sources

1. **PP-H** — Röchling Industrial, Polystone® P homopolymer grey, extruded. Technical Data Sheet, version 5.0, released 08/12/2025 (PIM-ID 590977). https://www.roechling.com/industrial/materials/thermoplastics/industrial-plastics/pp-h/polystone-p-homopolymer-grey-718434 (retrieved 2026-10-31).
2. **PP-B** — Röchling Industrial, Polystone® P copolymer white. Product page guideline values (product 591115). https://www.roechling.com/industrial/materials/thermoplastics/industrial-plastics/pp-b/polystone-p-copolymer-white-591115 (retrieved 2026-10-31).

Reading the table

- Values are for the named grades only. Another resin grade, sheet thickness, processing direction or test condition gives different results.
- To specify Xin Longdi sheet, agree the commercial grade and the document set (raw-material TDS, product data or test report) for your order.
- Material values are not design allowables; tanks and loaded parts are designed for long-term behaviour, temperature and media.

03 · SELECTION & APPLICATIONS

When PPH is the right sheet, and what to check first

PP-H: higher stiffness and softening point. The usual choice for chemical tanks, scrubbers and welded process equipment above 0 °C. (Based on the reference grades in section 02.)

PP-B: several times the notched impact strength and service down to –30 °C. Considered for outdoor, cold or impact-loaded parts. (Based on the reference grades in section 02.)

Xin Longdi sells its routine sheet line as PPH; the resin type and grade are confirmed for each order. Ask before specifying a copolymer or special formulation.

Statements marked “based on the reference grades” summarise Röchling guideline values (B · Reference). They are not Xin Longdi test results.

Typical uses (after application review)

- Chemical storage and process tanks, including Xin Longdi's PPH extrusion-wound tanks
- Exhaust-gas scrubbers, ducts and fume-extraction components
- Electroplating and surface-treatment tanks and linings
- Water and wastewater treatment equipment
- Welded housings, covers, baffles and machined parts

Five things to confirm before choosing PPH

- **Media:** chemical names, concentrations, mixtures, cleaning agents
- **Temperature:** continuous and peak; PP-H is normally used above 0 °C
- **Load:** liquid level, support, long-term creep; thickness is a design result
- **Environment:** UV exposure, static, ignition sources, thermal movement
- **Documents:** drawing, tolerances, acceptance and required reports

Chemical resistance

Polypropylene resists many aqueous acids, alkalis and salt solutions. Strong oxidising acids, some aromatic and chlorinated solvents and elevated temperatures can attack or swell it. Suitability depends on concentration, temperature, exposure time and stress.

For a decision, check the specific medium against the resin supplier's resistance list and recognised references such as ISO/TR 10358 or the DVS 2205-1 media lists, and send us your media list for review. This document gives no chemical resistance guarantee.



PPH spiral extrusion winding of a tank shell · Xin Longdi workshop

04 · FABRICATION, QUALITY & LOGISTICS

From sheet to finished part in one workshop

Cutting and CNC machining

Sheets are cut to size and machined to drawings: profiles, holes, pockets and mating features. Critical dimensions and tolerances are agreed from the drawing before production.

Plastic welding

PP sheet is commonly joined by hot-gas, extrusion or heated-tool welding. Xin Longdi's workshop welds tanks, housings and assemblies, including hot-air welding, and extrusion-winds its PPH tank shells; the method for a given joint is agreed with the drawing. Weld quality depends on matched materials, equipment, parameters and operator control. The DVS 2207 series covers welding of thermoplastics and is often referenced in specifications.



Plastic welding of a pipe joint · Xin Longdi workshop

Tolerances and inspection C · Per order

Dimensional tolerances, flatness and the measuring method are confirmed in a written technical annex for each order. ISO 15013 describes requirements and test methods for extruded PP sheet and can serve as a basis for agreeing them; this document does not claim conformity with it.

Packing, storage and transport

- Protective film on request; pallet or project-specific packing
- Store sheets flat on a level, fully supported base
- Keep away from direct sunlight and heat sources; keep film on until fabrication
- Lift long sheets with spreader support to avoid bending and edge damage

Confirmed for each order C · Per order

- Dimensional tolerances and acceptance method
- Commercial grade, TDS and test documents
- Minimum order, lead time and packing
- Chemical and temperature suitability for your media

05 · REQUEST FOR QUOTATION

What to include in your enquiry

A complete request lets us review the material and fabrication route in one pass.

01 Material and grade, or the application if the grade is open	02 Thickness, width and length; or the drawing with revision
03 Quantity, and whether full sheets, cut blanks or finished parts	04 Surface, colour and protective film requirements
05 Media, concentration and operating temperature (continuous / peak)	06 Tolerances, acceptance method and required documents
07 Packing, delivery country or port and target date	08 For fabricated parts: welding, assembly and inspection scope

Request a Quote ↗

Send your requirements or drawing. We review material, dimensions and fabrication scope before quoting.

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Document control

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Nature	Product overview and material selection guide. Not a certified technical data sheet. Prepared from Xin Longdi's published supply records and named public references. It does not certify product properties, compliance or suitability for a specific use.
Current version	https://xldplastics.com/documents/technical/xld-pph-sheet-overview-en-v1.0.pdf · product page https://xldplastics.com/en/products/plastic-sheets/pph-sheet
Revision	1.0 — first issue.

Related reading on xldplastics.com: PP vs PPH sheet names · PPH vs HDPE · PPH vs PVC · PPH sheet for chemical storage tanks · PPH spiral-wound tanks · Overseas purchasing guide.