

Photograph: fabricated plastic assemblies, Xin Longdi workshop (processing example, material not specified)

XIN LONGDI · ENGINEERING PLASTIC SHEET

PVC 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.

Document	Version	Language	Contact
XLD-PO-PVC-EN	1.0 · 2026-10-31	English	xldplastics.com

01 · PRODUCT

PVC sheet, produced in-house, with CNC machining and custom fabrication

Xin Longdi produces PVC sheet in its own plant and processes it in the same workshop: cutting, CNC machining and fabrication of components and assemblies. Grade, colour, dimensions and quantity are confirmed for each order.



Fabricated assemblies · Xin Longdi workshop · processing example



Cut components · Xin Longdi workshop · processing example

Supply data

A · Company data

Production	PVC sheet produced in-house by Xin Longdi, with cutting, CNC machining and custom fabrication in its own workshop
Material	PVC; specify the grade (for example PVC-U or PVC-C), colour and service conditions
Thickness	3–40 mm routine range; other thicknesses on request
Width and length	Agreed for the chosen grade and order
Supply formats	PVC sheets, CNC parts or custom assemblies
Application review	Media, temperature and joining requirements reviewed before quotation
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 information. Grade, dimensions, tolerances, minimum order and lead time are confirmed for each order. Available widths are confirmed per order; the 3.6 m maximum stated for PP / PPH sheet is not stated for PVC.

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 of a named PVC-U grade

Reference values · not Xin Longdi data. Published guideline values for one named Röchling grade, quoted to show how this material type typically behaves. Xin Longdi has not tested sheet to these methods. They are not typical, minimum or guaranteed values for Xin Longdi supply; flammability ratings belong to the named grade only.

Property	PVC-U reference	Unit	Test method
Density	**1.44**	g/cm³	DIN EN ISO 1183-1
Yield stress	**55**	MPa	DIN EN ISO 527
Elongation at break	**20**	%	DIN EN ISO 527
Tensile modulus	**3000**	MPa	DIN EN ISO 527
Notched impact strength (Charpy)	**4**	kJ/m²	DIN EN ISO 179
Shore hardness	**82**	Shore D	DIN EN ISO 868
Vicat softening temperature (B)	**75**	°C	DIN EN ISO 306, Vicat B
Heat deflection temperature	**68**	°C	DIN EN ISO 75
Service temperature	**–15 … +60**	°C	—
Linear thermal expansion	**≈ 0.075**	mm/(m·K)	DIN EN ISO 11359-2
Thermal conductivity	**0.16**	W/(m·K)	DIN EN ISO 8302
Water absorption	**0.2**	%	DIN EN ISO 62
Flammability (grade rating)	**V-0 · B1**	—	UL 94 (from 3 mm) · DIN 4102 (1–4 mm)

Source

1. **PVC-U** — Röchling Industrial, Trovidur® EC-N grey. Product page guideline values (product 590994). https://www.roechling.com/industrial/materials/thermoplastics/industrial-plastics/pvc-u/trovidur-ec-n-grey-590994 (retrieved 2026-10-31).

Reading the table

- Values are for the named grade only. Another grade, thickness or test condition gives different results.
- To specify PVC sheet from Xin Longdi, 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.

03 · SELECTION & FABRICATION

When PVC is the right sheet

PVC-U is much stiffer than PP or HDPE (tensile modulus about 3000 MPa in the reference grade), which suits flat panels and rigid fabricated parts.

Its service range is narrow (–15 … +60 °C in the reference grade); it becomes brittle in the cold. For higher temperatures, compare PVC-C or PP-H.

The reference grade carries flame ratings (UL 94 V-0, DIN 4102 B1). A Xin Longdi order has these ratings only if the supplied grade and documents confirm them.

Temperature, stiffness, impact and flammability statements are based on the reference grade in section 02 (B · Reference), not on Xin Longdi test results.

Typical uses (after application review)

- Ventilation and fume-extraction ducting and housings
- Equipment panels, covers and machine guards
- Surface-treatment and process tanks at moderate temperature, after media review
- CNC-machined components and fabricated assemblies

Chemical resistance

Rigid PVC resists many acids, alkalis and salt solutions. Some solvents, aromatic and chlorinated hydrocarbons and elevated temperatures can attack it; strong oxidisers need review.

Check the specific medium against the resin supplier's resistance list and recognised references such as ISO/TR 10358, and send us your media list. This document gives no chemical resistance guarantee.

Fabrication at Xin Longdi

Xin Longdi cuts and CNC-machines PVC sheet to drawings and fabricates components and assemblies. Joining methods (for example welding or bonding) and tolerances are agreed with the drawing for each project.



Fabricated assemblies · Xin Longdi workshop · processing example

Tolerances and inspection

C · Per order

Agreed in a written technical annex for each order; no conformity with a product standard is claimed here.

04 · REQUEST FOR QUOTATION

What to include in your enquiry

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

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

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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Version / date	1.0 · 2026-10-31 · English
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-pvc-sheet-overview-en-v1.0.pdf · product page https://xldplastics.com/en/products/plastic-sheets/pvc-sheet-fabrication
Revision	1.0 — first issue.