

BNM Group / BNM Petroleum

Technical Reference Sheet

Material	LDPE (Low Density Polyethylene)	Document ID	TR-QAPCO-LDPE-FD0270
Grade	Lotrène FD0270	Date Generated	2026-09-11
Reference Producer	QAPCO	Producer Country	Qatar

1. Reference Scope

This Technical Reference Sheet provides technical properties for **LDPE (Low Density Polyethylene)**, grade/designation **Lotrène FD0270**, as referenced from the official producer source cited below. It is intended for commercial pre-qualification and technical comparison only.

Reference Producer: QAPCO | **Producer Grade:** Lotrène FD0270

2. Application

Producer lists this grade for high-clarity bags, thin shrink film, lamination film, and foamed products.

3. Technical Properties

Property	Value	Unit	Test Method	Condition	Source Page
Melt Flow Index	2.4	g/10 min	ASTM D-1238	not shown on document	Polymer Properties section
Density @ 23°C	0.923	g/cm ³	ASTM D-792	23°C	Polymer Properties section
Crystalline Melting Point	112	°C	ASTM E-794	not shown on document	Polymer Properties section
Vicat Softening Point	96	°C	ASTM D-1525	not shown on document	Polymer Properties section
Tensile Strength @ Yield (MD/TD)	12/12	MPa	ASTM D-882	MD/TD	Film Properties section
Tensile Strength @ Break (MD/TD)	28/24	MPa	ASTM D-882	MD/TD	Film Properties section
Elongation @ Break (MD/TD)	430/660	%	ASTM D-882	MD/TD	Film Properties section
Tear resistance (MD/TD)	90/70	N/mm	ASTM D-1922	MD/TD	Film Properties section
Puncture Force	50	N	Internal Method	not shown on document	Film Properties section
Impact Strength, F 50	85	g	ASTM D-1709	not shown on document	Film Properties section
Coefficient Of friction	1.2	not shown on document (dimensionless)	ASTM D-1894	not shown on document	Film Properties section
Haze	5.5	%	ASTM D-1003	not shown on document	Film Properties section
Gloss (@ 45°)	73	not shown on document	ASTM D-2457	45°	Film Properties section

4. Processing / Handling Notes

Parameter	Value	Unit	Notes	Source Page
Melt Temperature Range	140-150	°C	—	Processing section
Blow Up Ratio	between 2:1 and 3:1	ratio	—	Processing section
Recommended Thickness Range	20 to 100	µm	—	Processing section
Processing Note	n/a	n/a	can be easily processed on all types of extruders to make blown or cast films	Processing section

5. Commercial / Technical Notes

- "additive free grade"
- Storage: store in a dry and well-ventilated area, not exposed to direct sunlight and/or heat; should not be stored for more than three months from receipt date.
- Complies with US, EU and other food contact legislations; "Limitations may apply."
- General disclaimer: values reported are results of tests; actual properties may vary depending on batch and extrusion conditions.

6. Restrictions / Source Notes

- **NOT SUITABLE FOR PHARMACEUTICAL OR MEDICAL APPLICATIONS**

7. Source Attribution

Official Source URL	https://www.qapco.com/wp-content/uploads/2016/09/FD0270.pdf
Source Document Title	FD0270 Low Density Polyethylene
Source Revision	not shown on document
Source Document Date	not shown on document (no visible date, revision number, document code, or version identifier found in header, footer, or title block; URL path implies an upload date of 2016/09 but this is not printed on the document itself)
Source Document Type	Technical Data Sheet (TDS)
Source Verified	Yes
Exact Grade Match	Yes

Producer data is cited solely as technical reference information. BNM does not claim manufacturer, agency, distributorship, or endorsement status unless separately stated in a signed commercial agreement.

8. BNM Disclaimer

This Technical Reference Sheet is prepared by BNM for commercial pre-qualification and technical comparison purposes only. Values are reproduced or paraphrased from the cited official producer source where available in the locked research dataset. Final producer, origin, grade, specification, packaging, shipment terms, SDS, and COA must be confirmed in BNM's commercial offer, contract, and shipment documents. COA is batch-specific and is not represented by this reference sheet.

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