



ZENITH ECLIPSE JOURNAL

POLYETHYLENE

The grade makes the difference.

Resin family. Producer grade. Conversion process. Build a polyethylene buying brief that connects measured properties, application approval and the route into your production site.

THE COVER STORY

Keep the producer and grade code together.
Read melt flow with its test conditions.
Connect technical approval with cargo readiness.

03

SELECT YOUR PRODUCT

Choose by end use and product form.

04

READ THE QUALITY

Match the tests to your requirements.

06

CONNECT THE ROUTE

Align the cargo contract with delivery.

THE ZENITH ECLIPSE APPROACH

Begin with the conversion line.

A resin family narrows the search. The exact grade, equipment and finished article define the purchase.



We review polyethylene enquiries for film converters, packaging manufacturers, molders, pipe producers and industrial processors. Share the existing grade, conversion method and finished-product requirements so the technical comparison has a clear starting point.

Polyethylene is a polymer resin; ethylene feedstock is a separate product with a different specification. Within PE, HDPE, LDPE and LLDPE describe families containing many grades. Similar melt-flow or density values do not establish interchangeability.

Build the brief around grade identity, additives and the tests your application needs. Add sample or line-trial approval, packing and receiving dates. Our team will confirm the proposed material and delivery scope, with alternatives subject to your technical review and written acceptance.

IN THIS EDITION

- 03** Choose the resin route
- 04** Put conditions beside properties
- 05** Preserve grade and cleanliness
- 06** Connect release and delivery
- 07** Build the resin RFQ
- 08** Talk to our team

PRODUCT PORTFOLIO

Choose the resin route.

These families and compounds cover different requirements. Use the current producer grade data and your application brief to select the material.



01 HDPE resin

For a rigid article, film or extrusion brief, identify the producer grade and required properties. Share mold or line conditions and durability tests; general HDPE identity does not qualify a pipe compound.

02 LDPE resin

Define the film, coating, molding or other conversion process. Agree flow conditions, additives and the application tests. Film optics or sealing should be assessed on the specified article and processing conditions.

03 LLDPE resin

State the exact grade or approved benchmark, comonomer information where relevant and the blend or process. Compare film performance at an agreed gauge; the family name alone does not establish equivalence.

04 Pipe PE compounds

Name the intended service, pipe standard and producer-designated compound. Require evidence for the claimed classification and formulation. Generic HDPE or a commercial PE class label cannot establish project approval.

05 Modified PE compounds

Define the base resin, pigment, filler or additive package and formulation revision. Agree compound-specific acceptance tests and end-use evidence. A modified material needs its own specification and approval.

THE BUYER'S QUALITY GUIDE

Put conditions beside properties.

A useful comparison retains the grade, method, specimen and test conditions. Agree lot release and application approval separately.



PARAMETER	WHAT THE BUYER SHOULD CHECK
Grade & material status	Record PE family, producer, grade code and formulation revision. Declare virgin, recycled or blended status and supplied form. A designation system supports identity; it does not approve every application.
Melt flow	Report MFR in g/10 min with temperature, load and method, such as ISO 1133-1:2022. Distinguish mass-flow from volume-flow results. A matching value alone does not predict all processing behaviour.
Density & conditioning	State units, method, temperature and specimen preparation or conditioning. ISO 1183-1:2025 provides density methods. Compare the same material and basis, especially when fillers or additives modify the compound.
Additives & appearance	Declare relevant slip, antiblock, stabilisers, pigments, fillers and processing aids. Agree colour, gels, specks, fines and foreign-material acceptance using a defined inspection or application test.
Application performance	Name required mechanical, thermal or durability tests with specimen preparation and conditions. Specify film gauge or article geometry where relevant. Approve the resin through agreed laboratory or line trials.
Documents & end use	Distinguish typical TDS properties from agreed lot COA results. Obtain the current grade SDS and required destination declarations. Conformity evidence must match the formulation, intended use and finished article.

A grade number needs a test context.

- SOURCE READING
- ISO / PE designation and specification
 - ISO / Melt flow and test conditions
 - ISO / Density and specimen basis

PACKING & RECEIVING

Preserve grade and cleanliness.

Match packaging and transfer equipment to the offered material, while keeping grade and lot identity visible.

01

BAGS / PALLETS

Producer-sealed bags

Agree net quantity, closure, pallet arrangement and labels showing producer, grade and lot. Check packaging condition and handling protection. Keep distinct grades segregated through warehouse receipt and production issue.

02

LARGER PACKS / FACTORY

Big bags & octabins

Confirm suitable construction, closure, lifting and discharge arrangements for the quoted form. Match the receiver's equipment and contamination controls. Feasible formats depend on producer, grade, quantity and route.

03

BULK / TRANSFER PLAN

Approved bulk systems

Review dedicated or suitably cleaned equipment, receiving connections and loading compatibility. Agree loss-resistant transfer, lot separation and intake checks. Confirm the bulk configuration for the specific resin and handling system.

Keep the right grade inside the right pack.

Keep material clean, dry and protected according to the producer's storage guidance and current SDS. Include storage period, temperature exposure and powder-specific requirements where relevant. Contain pellet losses during loading and transfer. Agree damaged-pack and spill procedures, and confirm the available packaging in the quotation before freight is booked.

Connect release and delivery.

Align technical approval, packaging and cargo information with the converter's receiving and production schedule.

OCEAN

ROAD

RAIL

MULTIMODAL

We review resin and freight requirements together. Share producer and grade, physical form, quantity, packing and receiving place. Allow time for the agreed sample or line trial before the proposed material is released for loading.

01 Define the handover

Name the Incoterms® 2020 rule and exact port or place. Align loading, carriage, insurance and destination responsibilities so the resin quotation and freight scope describe the same delivery.

02 Plan containment

For pellet containers, review loss-resistant packaging, cargo identification and appropriate stowage with the carrier. Use current IMO guidance and applicable route requirements; confirm handling and classification from the exact material SDS.

03 Make identity travel

Agree TDS, SDS, any contracted lot COA, origin evidence and commercial transport records. Retain grade, lot, pack and seal references. Confirm destination declarations, document deadlines and receiving checks.

SOURCE READING

[IMO / Pellet containment and carriage](#)

[ICC / Incoterms 2020](#)

PROCUREMENT WORKSHEET

Build your polyethylene RFQ.

Give purchasing, technical, production and freight teams these eight details for a comparable offer.

YOUR POLYETHYLENE ENQUIRY / EIGHT DETAILS

- ☐ PE family, producer, exact grade code or approved benchmark
- ☐ Conversion process, equipment, blend and intended finished article
- ☐ Material status, formulation, additives, colour and supplied physical form
- ☐ MFR conditions, density basis and critical property test methods
- ☐ Sample, laboratory or line-trial approval and substitution procedure
- ☐ Quantity, packaging, lot marks and receiving equipment or connections
- ☐ Destination, Incoterms® rule and shipment or arrival window
- ☐ Current SDS, lot evidence and required end-use declarations

Still defining the specification?

Start with the existing grade or benchmark, conversion process, quantity and destination if the specification is developing. Share the properties and trial evidence your team needs. Identify essential approvals and document requirements. Our team will confirm the offered grade, packing and delivery scope in writing.

[SEND YOUR POLYETHYLENE REQUIREMENTS](#)



ZENITH ECLIPSE
CO

YOUR NEXT POLYETHYLENE PURCHASE

Your product. Your requirements.

Let's connect the details.

Share the PE family, producer grade, conversion process, property requirements, quantity and destination. Our team will review your polyethylene enquiry and confirm the applicable material, evidence and delivery scope.

POLYETHYLENE SALES

sales@zenitheclipse.com

FREIGHT & LOGISTICS

trans@zenitheclipse.com

TELEPHONE / WHATSAPP

+971 4 250 0715



EXPLORE POLYETHYLENE SUPPLY

zenitheclipse.com

Scan to view products
and request a quotation.



Office 204, The Citadel Tower, Marasi Drive, Business Bay, P.O. Box 73020, Dubai, United Arab Emirates

Availability, producer, grade, material status, properties, declarations, prices, packing and delivery terms are confirmed in the offer and contract. Application approval depends on the agreed technical evidence and trials. Images provide editorial context.