JINYU / EVA SEALING MATERIALS

Technical Selection Guide

EVA gasket rings and strips for metal pail and drum lids

Typical reference values. This guide supports initial material selection. The approved, grade-specific TDS and agreed specification control procurement and production. No new laboratory validation, batch approval or certification is implied.

1. Choose the material grade

Match the filled product and lid design before comparing grades. Temperature, contact duration, groove geometry, compression and finished-package testing determine suitability. A grade name alone is not an application approval.

Grade	Initial selection reference	Package validation focus
Economy EVA	Asphalt, waterproofing and high-viscosity products. Catalog stacking reference: <75 kg.	Lid fit, compression and actual transport/stacking load.
High-density EVA	Engineering coatings. Catalog stacking reference: <125 kg.	Groove fill, closing force and recovery under the actual load.
Food-grade EVA	Selected common industrial media after compatibility checks. Declaration available on request.	Confirm the filled medium and the scope of any food-contact documentation.
High-elastic food-grade EVA	High-rebound and hydraulic-test projects. May be evaluated as an alternative gasket system.	Verify fit, recovery and finished-package sealing before substitution.
Solvent-resistant EVA	Solvent-based coatings, paints and chemical pail applications requiring compatibility evaluation.	Actual solvent blend, contact time, temperature, swelling and leakage.

2. Typical mechanical properties

Property	Economy	High-density	Food-grade	High-elastic	Solvent-resistant
Density (kg/m³)	85 ± 5	≥125	85 ± 5	180 ± 5	≥150
Hardness (Shore C)	40-45	50-60	40-45	45-50	50-60
Tensile strength (MPa)	0.6	1.5	1.15	1.9	Approx. 1.7*
Elongation (%)	≥110	≥160	≥140	≥220	≥180*

* Solvent-resistant tensile strength and elongation are typical reference values. Its detailed TDS calls for third-party confirmation when required by the customer. Values above are not a finished-package pressure rating or release specification.

Reference data and approval

Use material data together with the actual package

3. Material family and qualitative compatibility references

Reference	Economy	High-density	Food-grade	High-elastic	Solvent-resistant
Material family	EVA / LDPE / CaCO3	EVA / LDPE / CaCO3	LDPE	EVA / LDPE / POE	EVA / LDPE / rubber
MEK observation*	No reaction	No reaction	No reaction	No reaction	No reaction
Toluene observation*	Slight swell	Slight swell	Slight swell	Slight swell	Resistance reference

* These are qualitative source references. The series sheet does not state exposure temperature, duration or quantitative acceptance limits. Confirm compatibility with the actual formulation and agreed test method; these entries are not a universal chemical-resistance guarantee. Material families are references, not complete formulation disclosures.

4. Storage references

Grade	Source storage period	Conditions / controlling requirement
Economy EVA	2 years	Approved grade-specific storage conditions control.
High-density EVA	3-5 years	Approved grade-specific storage conditions control.
Food-grade EVA	3 years	Approved grade-specific storage conditions control.
High-elastic food-grade EVA	3-5 years	Approved grade-specific storage conditions control.
Solvent-resistant EVA	3 years	Cool, dry, ventilated warehouse; avoid direct sunlight and high-temperature heat sources. Detailed solvent-resistant TDS reference.

Storage periods are reference values, subject to the approved grade-specific conditions and specification. Reconfirm material condition and package suitability before use.

5. Confirm before production

Medium and exposure: agree the formulation, solvent blend, contact duration, temperature and compatibility-test criteria. **Package:** validate groove, gasket section, compression, closing conditions, recovery and leakage with the finished package under the required storage and transport conditions.

Documents: request the grade-specific TDS, agreed specification and required reports. Food-contact or regulatory suitability depends on the documented product and end-use scope.

Reference documents: EVA Sealing Ring Series TDS, JY-EVA-TDS-2026-06, 29 Jun 2026; Solvent Resistant EVA Sealing Ring TDS, Version 1.0, June 2026. Editorial revision 2026-11-15. The approved grade-specific TDS controls.