

Reference Guide:

Requirements of TR CU 013/2011 for the Import of Petroleum Products into the Republic of Armenia

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Introduction

TR CU 013/2011 (Technical Regulation of the Customs Union) is a mandatory regulatory document in force within the Eurasian Economic Union (EAEU), of which Armenia is a member. This regulation establishes uniform requirements for the safety, quality, and environmental compliance of all types of petroleum products released for circulation within the single customs territory.

- **Date of implementation in Armenia:** April 14, 2015 (Procedure for the Implementation of the CU Technical Regulations in the RA).
- **Current status:** All transition periods have expired. As of December 31, 2016, the circulation of K3 and K4 class fuels is prohibited in Armenia.

Critical rule: When imported into Armenia, all batches of petroleum products must be certified to environmental class **K5 (Euro 5) ONLY**.

Scope of Application of TR CU 013/2011

The Technical Regulation applies to the following types of petroleum products:

- **Motor gasoline** (AI-80, AI-92, AI-95, AI-98)
- **Aviation gasoline** (for piston aircraft engines)
- **Diesel fuel** (summer, mid-season, winter)
- **Diesel fuel** for agricultural and off-road equipment
- **Marine fuel** (distillate and residual)
- **Aviation kerosene** (fuel for jet engines — Jet A, Jet A-1)
- **Fuel oil** (fuel for boiler plants)

Fuel environmental classes

The regulation provides for 4 environmental classes, distinguished by sulfur content. Please note the current restrictions in Armenia:

Class	Sulfur content (max., mg/kg)	Status in Armenia
K2	500	✗ Banned since 2013
C3	50	✗ Banned since Dec. 31, 2016

Class	Sulfur content (max., mg/kg)	Status in Armenia
K4	50 → 10	✗ Prohibited as of December 31, 2016
K5	10	✓ Required

Requirements for technical and operational performance (Class K5)

Gasoline

Parameter	Unit	Standard	Test method
Octane number (isooctane method)	units	80, 92, 95, 98	GOST 511 / EN ISO 5163
Density at 15 °C	kg/m ³	720–775	GOST 2084 / EN ISO 3104
Saturated vapor pressure	kPa	45–60	GOST 1756 / EN ISO 4953
Fractional composition	°C	70–100% distills in the range of 200–280°C	GOST 2177 / EN ISO 3405
Boiling point	°C	not higher than 215	According to GOST 2177
Residue after evaporation	% by vol.	not more than 1.5	GOST 1769 / EN ISO 3734
Benzene content	% by vol.	not more than 1.0	EN 238 / GOST R 51866
Aromatic hydrocarbon content	% by vol.	not more than 42	EN 12916 / GOST R 51866
Olefin content	% by vol.	not more than 21	EN 14143
Mass fraction of sulfur (K5)	mg/kg	not more than 10	EN ISO 20846 / GOST 32514
Lead content	mg/L	0 (prohibited)	EN 12458

Parameter	Unit	Standard	Test method
Iron and manganese content	mg/L	0 (prohibited)	EN 12058 / EN 12057
Corrosion of copper plate	points	1	GOST 6377 / EN ISO 2160
Oxidability at 100 °C	mg/100 cm ³	not more than 6	GOST 2784 / EN ISO 7525
Content of mechanical impurities and water	—	None	GOST 6217 / EN ISO 6614

Diesel fuel

Summer diesel fuel (DT-S)

Parameter	Unit	Standard	Test method
Cetane number	units	not less than 51	EN ISO 5165 / GOST 3122
Density at 15 °C	kg/m ³	820–845	GOST 2084 / EN ISO 3104
Viscosity at 40 °C	mm ² /s	2.0–4.5	GOST 33 / EN ISO 3104
Cloud point	°C	not higher than +5	GOST 5066 / EN ISO 3015
Pour point	°C	not higher than -5	GOST 5068 / EN ISO 3104
Flash point	°C	not lower than +55	GOST 4333 / EN ISO 2719
Mass fraction of sulfur (K5)	mg/kg	not more than 10	EN ISO 20846 / GOST 32514
Fractional composition at 50%	°C	245–290	GOST 2177 / EN ISO 3405
Fractional composition 95%	°C	not higher than 360	GOST 2177 / EN ISO 3405
Biodegradability	%	not less than 90	EN 14112 / GOST 7155

Parameter	Unit	Standard	Test method
Lubricity (HFRR, wear)	µm	not more than 460	EN ISO 12156
Polycyclic aromatic hydrocarbon content	% by mass	not more than 11	EN 12916
Content of mechanical impurities and water	—	None	GOST 6217 / EN ISO 4406

Winter (DT-W) and Inter-seasonal (DT-I) diesel fuel

Parameter	Unit	Standard (Winter)	Standard (Inter-seasonal)
Viscosity at -20 °C	mm ² /s	not more than 5.8	—
Cloud point	°C	not higher than -10	not higher than 0
Freezing point	°C	not higher than -20	not higher than -10

Aviation kerosene (Jet A-1, Class K5)

Parameter	Unit	Standard
Density at 15 °C	kg/m ³	775–840
Viscosity at -20 °C	mm ² /s	8 max.
Viscosity at 0 °C	mm ² /s	12 max.
Flash point	°C	not lower than +38
Freezing point	°C	not higher than -47 (for Jet A-1)
Mass fraction of sulfur (K5)	mg/kg	not more than 10
Static impurities / water content	mg/L	0
Acid number	mg KOH/g	not more than 0.015

Fuel oil (Class K5)

Parameter	Unit	Standard
Kinematic viscosity at 100 °C	mm ² /s	5.5–24.0
Density at 15 °C	kg/m ³	890 max.
Flash point	°C	not less than +65
Mass fraction of sulfur (K5)	mg/kg	not more than 10
Content of mechanical impurities	% by mass	not more than 0.5
Water content	% by volume	not more than 1.0

Permissible additives and admixtures

According to TR CU 013/2011, strict rules for the use of additives apply:





For automotive gasoline:

- Antioxidant additives
- Anti-corrosion additives
- Antistatic additives
- Depressant additives (those that lower the pour point)
- **Prohibited:** Lead, iron, manganese, and their compounds

For diesel fuel:

- Cetane number improvers
- Antioxidant additives
- Pour point depressants
- Anti-corrosion additives
- Antistatic additives
- **Prohibited:** Metal-based additives (except for antistatic additives with a content of ≤ 24 mg/L)

For aviation kerosene:

-  Anti-icing additives (dihydroxydiethylformamide, DHDF)
-  Antioxidant additives
-  Antistatic additives
-  **Prohibited:** Lead and other metallic impurities

Required documentation for import

When importing petroleum products into Armenia, the following set of documents is required:

- 1. Declaration of Conformity (EAC) — Required**
 - **What it is:** An official document confirming that the fuel shipment complies with all requirements of TR CU 013/2011.
 - **Requirements:** Issued prior to the batch being released into circulation, registered in the unified EAEU registry, bears the EAC logo, and is valid for 1 to 3 years for a series of batches.
 - **Issued by:** Fuel manufacturer, accredited laboratories, or authorized representatives of the manufacturer.
- 2. Quality Certificate — Required for each batch**
 - Fuel name and grade (e.g., "AI-95-K5 Gasoline").
 - Environmental class — **must be K5**.
 - Name and details of the manufacturer, batch/lot number, date of manufacture.
 - Test results FOR ALL PARAMETERS (sulfur max. 10 mg/kg, octane/cetane number, etc.).
 - Unified Conformity Mark (EAC), number and date of the declaration of conformity.
 - *Important: The certificate must physically accompany the batch to the end user.*
- 3. Certificate of Conformity — If necessary**
 - May be required for the first batches from a new supplier, when changing the fuel formulation, or at the request of customs.

Procedure for Importing Fuel into Armenia

- 1. Verification of documents with the supplier:** Request a copy of the EAC declaration and the quality certificate; verify that the fuel meets Class K5 standards and has a sulfur content of no more than 10 mg/kg.
- 2. Customs procedures:** Submit a customs declaration, provide original documents, and undergo a possible physical inspection of the shipment.
- 3. Testing (upon request):** Customs may take a sample for laboratory testing (5–15 business days, verification of critical parameters, especially sulfur).
- 4. Release for circulation:** If the results are positive, a release document is issued, and the shipment may be sold.

Penalties and Liability

Note: Severe penalties are imposed in Armenia for violations of the requirements of TR CU 013/2011.

Violation	Penalty
Use of fuel of a grade lower than K5	Confiscation of the shipment, fine of up to 100 million drams
Lack of a declaration of conformity	Prohibition on release into circulation, fine
Excess sulfur content	Confiscation, fine, possible criminal liability
Presence of lead in gasoline	Criminal liability
Falsified or expired documents	Fine + possible criminal prosecution

Recommended accredited laboratories in the EAEU

- **In Armenia:** Testing centers of the RA Ministry of Economic Development and Investments
- **In the Russian Federation:** Novotest Center (Moscow, St. Petersburg), VNIIS (Moscow)
- **In Belarus:** "Proverka" Certification Center, "BelTesting" LLC
- **In Kazakhstan:** KazATU, Ministry of Education and Science of the Republic of Kazakhstan

Frequently Asked Questions (FAQ)

Q: Is it possible to import Class K4 diesel fuel?

A: NO. As of December 31, 2016, Class K4 and lower grades are prohibited in Armenia. The shipment will be confiscated.

Q: What is the maximum permissible sulfur content in K5?

A: A maximum of 10 mg/kg (or 0.001% by weight). This is the critical limit.

Q: Is a quality certificate alone sufficient without an EAC declaration?

A: NO. Both documents are required. Without a legally valid EAC declaration, the shipment will not clear customs.