



TECHNICAL PASSPORT

ALSION for Gasoline and LPG Engines

Official English product technical passport based on HG-ALSION product documentation



Document ID	TP-ALS-010-EN
Product code	UA 010/07/11/2025
Issue date	27 June 2026
Version	1.3
Original product name	ALSION для бензинових та газових двигунів
Manufacturer	PRIVATE ENTERPRISE "HG-ALSION"
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1. Description

High-performance additive for gasoline and gas engines based on ALSION technology. ALSION technology belongs to patented nanotechnology, namely a restorative energy- and resource-saving technology used for treatment of friction units of mechanisms and assemblies operating in an oil medium for protection against wear, restoration of friction units, extension of service life, reduction of energy consumption, increase of efficiency, extension of lubricant service life, reduction of harmful emissions into the environment and reduction of thermal load.

2. Properties

- Restoration of mechanisms and assemblies with wear up to 90% to nominal values.
- Fuel economy up to 18%: application of ALSION makes it possible to reduce energy consumption, leading to significant fuel savings and lower operating costs.
- Increase of service life / overhaul interval of mechanisms and assemblies up to 4 times: ALSION restores and protects mechanisms and assemblies against wear and corrosion.
- Reduction of overheating up to 60%.
- Possibility of operating equipment under oil starvation (emergency oil leakage) and/or overheating (cooling system damage) for up to 3 engine hours without damage to mechanisms and assemblies.
- Improved environmental indicators: ALSION contributes to reduction of harmful emissions into the atmosphere and lower pollution (CO₂ - 5%, CO - 15%, CH - 8%).

3. Main physical and chemical properties

Parameter	Actual value
Aggregate state	Liquid
Form	Viscous
Colour	Transparent / white / yellow
Odour	Odourless
Viscosity, mm ² /s	400-1050
Density, kg/dm ³ at 20 °C	0.998-1.500
Flash point in open cup, °C, not less than	250
Auto-ignition temperature, °C, not less than	400
Solidification temperature, °C, not less than	-50

4. Composition / information on components

ALSION technology is a composition of nanostructured metakaolin dehydration products of natural and/or synthesised hydrates of inorganic compounds and their mixtures with saturated hydrocarbons and/or organosilicon polymers.

- Does not contain hazardous substances in reportable quantities.
- Non-toxic according to the product technical passport.
- Not classified as carcinogenic.
- Explosion hazard is absent.
- Does not possess corrosive properties.
- Does not change the physicochemical properties of substances with which it is combined.

5. Safe storage conditions

- Store in the original manufacturer packaging.
- Protect from light.
- Protect the packaging from damage.
- Keep away from foodstuffs and animal feed.

6. Packaging / container

3 syringe tubes x 10 g in a cardboard box.

7. Shelf life

5 years from the date of manufacture.

8. Hazard identification

- Does not require labelling as hazardous.
- Does not meet the classification criteria under Regulation (EC) No 1272/2008 (CLP).
- Does not meet the criteria for PBT and vPvB.
- Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.
- Does not irritate mucous membranes or skin.
- No special precautions are required.

9. Precautions for safe handling

- Avoid contact with eyes and ingestion.
- Do not eat, drink or smoke while using the product.
- If on skin: remove contaminated clothing and wash with plenty of soap and water.
- If in eyes: rinse with plenty of water for at least 15 minutes.

10. Document statement

The information in this technical passport is based on careful research and is considered reliable. This technical passport is prepared and intended exclusively for a high-performance additive for gasoline and gas engines based on ALSION technology.

11. Document verification

Certificate	a3f9c7d2-4b1e-4f6a-9c2e-8b3d5a7f2c28
Valid from	28 October 2025 00:00:00
Valid to	27 October 2027 23:59:59
Original issue date	07 November 2025

12. Rights and restrictions

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