

Automotive Maintenance

Brake Fluid DOT-3 / DOT-4

(Fluido para Frenos DOT-3 / DOT-4)

Substitution or filled of the brakes fluid. It is a synthetic fluid elaborated from glycol esters and additives, used to protect the hydraulic systems of disc and drum brakes with antilock braking system (ABS) of all type of vehicles. It is recommended for trucks, cars, buses, motorcycles and all type of vehicles' braking systems that require a brake fluid that exceeds the regulation's requirements of COVENIN 361, SAE J-1703, SAE J-1704, ISO 4925 class 4, FMVSS 116, DOT-3 and DOT-4. It may be used as hydraulic fluid in the vehicles' clutch system if the manufacturer recommends it.

The brake fluid for DOT-4 Ultrarosso is developed to present among its qualities a higher boiling point, which allows its performance even in severe operation conditions (high temperatures generated in the brakes system) and avoids the formation of steam traps (fluid compression).

BENEFITS:

- It preserves its incomprehensibility qualities under extreme conditions, which guarantees that the brake or clutch pressure transmits instant and consistently through the hydraulic systems.
- It has additives that impart excellent protection properties in all the brakes system, both metallic and non-metallic (elastomers and plastic), extending its useful life period.
- Its polyglycol type constituents confer lubricant properties to the product, lowering the premature wear of the brakes system components.
- It is compatible with any liquid for brakes DOT-3 / DOT-4, respectively.
- It prevents the corrosion and rustiness of the metals in the brakes hydraulic system.
- It prevents system leaks because it avoids the hardening or softening of the elastomeric type components with which it makes contact.
- It has a high boiling point to avoid the formation of steam traps and its consequences during the braking.

INSTRUCTIONS:

Use as a filler or replacement fluid in automotive that require DOT-3 / DOT-4 according to the recommendations of the vehicle's manufacturer.



The mix of fluids for brakes of different DOT designation (U.S. Department of Transportation) may degrade the properties of the fluids with better conditions (DOT-3, DOT-4, DOT-5, 1).

The product must never be used when it is specified a DOT-5 brakes fluid, because they are completely different technologies.

It is recommended to completely change the brakes system fluid according to the recommendations of the vehicle's manufacturer, or every two years or every 40,000 km. Once the required quantity of the product has been used, immediately close the container to avoid the product's absorption of humidity.

MAIN COMPONENTS:

Mixture of glycols, polyalkylene glycols, glycol ethers and inhibitor additives.

STORAGE:

For more information about the instructions, storage, and availability of the product, it is recommended to consult the Security Sheet (MSDS), or contact your Sales Advisor.

WARNING:

Toxic product, do not ingest. In case of accidental ingestion, do not induce vomiting and find medical care quickly. Avoid accidental contact with eyes and in such case rinse with abundant water. Avoid prolonged contact with the skin, after its manipulation rinse with water and soap. Maintain out of the reach of children.

Avoid contact with the vehicle's paint; in case it happens wash it with water without rubbing the surface.

EXPIRATION DATE:

3 years from its elaboration date, as long as the container is sealed and stored in a clean, dry, and fresh place and protected from direct sunlight.

TYPICAL CHARACTERISTICS

PROPERTY	METHOD	RESULTS	
		DOT-3	DOT-4
Visual Appearance	Visual	Blue	Yellow
Specific Gravity @ 15.6 °C	ASTM D-1122 o	1.09 1.00	1,08 – 1,09
	ASTM D-4052	1,08 – 1,09	1,08 - 1,09
Kinematic Viscosity @ 40 °C, cSt	ASTM D-445	<mark>980,0 – 980,</mark>	<mark>1260 - 1260</mark>
Kinematic Viscosity @ 100 °C, cSt	ASTM D-445	1,80 – 1,80	<mark>2,40 - 2,40</mark>
Boiling Point	FMVSS 116.5.1 /	240 – 245	245 -278
Dry, ºC	ISO 4925		
Boiling Point	FMVSS 116.5.2 /	106 – 108	165 -168



Wet, ºC	ISO 4925		
pH, adm.	ASTM D-1287	8 - 10	8 - 10
Humidity Content, %	ASTM D-6304	0,10 - 0,20	0,10 - 0,20

Typical characteristics are average values obtained within the production tolerance and they must not be considered as quality control parameters nor they represent a specification. The presented numbers are subject to changes without previous notice.

Do not pollute. Dispose the containers, oils and fluids in authorized places. Protect the environment, together we can succeed.

PRESENTATION:

- Box of 12 containers, 355 cm3 each
- Box of 12 containers, 946 cm3 each.