

Technical News

Discover TRW fluid range.

This year TRW will produce over 22 million calipers for car manufacturers all over the world. So it should come as no surprise to learn that TRW Aftermarket also supplies a world leading range of brake fluids, cleaners, mineral oils, synthetic oils and greases. A range that never stops short on vehicle safety or quality.

As you can see on the table page 2, TRW brake fluids are packaged in a range of option to cover both retail and workshop requirements. All TRW fluids exceed the respective international DOT specifications. Thorough laboratory testing of all braking system components ensures that our fluid protects the system for as long as possible.

The colour adheres to the Federal Motor Vehicle Safety Standards specifications, FMVSS 571.116 - all DOT-Type brake fluids should be colourless to amber to eliminate possible confusion with other automotive fluids.

TRW's packaging is high-load bearing for easy transportation and storage. Heat-sealed caps ensure no contamination.



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Overview of TRW fluid range

Fluid Type	Description	TRW Color code	TRW Part number	> your Company No.<	Volume per Unit	Minimum order quantity	Units per carton	Units per Palette
Brake Fluid	DOT 3		PFB325		250 ml	1	20	1400
	DOT 3		PFB350		500 ml	1	20	720
	DOT 3		PFB301		1 l	1	10	330
	DOT 3		PFB305		5 l	1	4	72
	DOT 3		PFB320		20 l	1	1	16
	DOT 4		PFB425		250 ml	1	20	1400
	DOT 4		PFB450		500 ml	1	20	720
	DOT 4		PFB401		1 l	1	10	330
	DOT 4		PFB405		5 l	1	4	72
	DOT 4		PFB420		20 l	1	1	16
	DOT 4 ESP		PFB440*		1 l	1	10	330
	DOT 5.1		PFB525		250 ml	1	20	1400
	DOT 5.1		PFB550		500 ml	1	20	720
	DOT 5.1		PFB501		1 l	1	10	330
	DOT 5.1		PFB505		5 l	1	4	72
	DOT 5.1		PFB520		20 l	1	1	16
	Grand Prix 600		PFB601		1 l	1	10	330
Grease	XZS120		PFG110*		25g	1 pack containing 10 x 25g tubes		
Brake Cleaner			PFC105		500 ml	1	12	840
			PFC115		5 l	1	4	72
Hydraulic System	LHM Plus Mineral		PFM201		1 l	1	10	330
	LHM Plus Mineral		PFM205		5 l	1	4	72
Suspension Fluid for C5	Synthetic		PFS801*		1 l	1	10	330

*NEW

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TRW Brake Fluid Range - Specifications and Applications

TRW Brake Fluids cover all market needs and, not only meet, but far exceed all International Specifications. This means a higher level of performance in critical properties such as Boiling Points - see specifications and applications guide below.

DOT 3	DOT 3 Specification	TRW DOT 3	Recommended Application
Dry Boiling Point	205°C	243°C	Vehicles with drum brakes front and rear.
Wet Boiling Point	140°C	151°C	Hydraulic Clutch System
DOT 4	DOT 4 Specification	TRW DOT 4	Recommended Application
Dry Boiling Point	230°C	270°C	Vehicles with Disc Brakes on front, Drum Brakes on rear.
Wet Boiling Point	155°C	163°C	Vehicles with Disc Brakes all round. Suitable for vehicles with ABS systems.
DOT 4 - ESP	DOT 4 Specification	TRW DOT 4 - ESP	Recommended Application
Dry Boiling Point	230°C	270°C	Vehicles with ESP/ASR and other conventional brake systems using Glycol Ether based Brake Fluids; specially formulated to enable Electronic Stability Program (ESP) systems to operate effectively over a wide temperature range.
Wet Boiling Point	155°C	171°C	
DOT 4 - Racing	DOT 4 Specification	TRW DOT 4 - Grand Prix 600	Recommended Application
Dry Boiling Point	230°C	min. 312°C	Very high performance brake fluid specifically formulated to give ultimate safety and reliability in the most extreme Race and Rallye conditions.
Wet Boiling Point	155°C	min. 204°C	
DOT 5.1	DOT 5.1 Specification	TRW DOT 5.1	Recommended Application
Dry Boiling Point	260°C	269°C	Heavy, high performance cars, including those fitted with ABS systems. Formulated to provide an extra margin of safety. Improved viscosity performance at -40°C makes it safer for use in extremely cold climates.
Wet Boiling Point	180°C	187°C	
SSF		TRW SSF	Recommended Application
Dry Boiling Point		235°C	SSF Synthetic Fluid for Hydraulic Systems has been specifically formulated for use in the combined steering and suspension system on the Citroen C5; it is also suitable for use in other models where Citroen LDS fluid is specified.
Wet Boiling Point			

Brake Fluid Performance

Brakes work by converting energy into heat. Some of this heat is absorbed by the brake fluid. If brake fluid boils, „vapour lock“ will occur, which, for the driver, means brake failure. Therefore, brake fluid must start with a high boiling point, known as the „Dry Boiling Point“. But brake fluid absorbs moisture from the air, which, in time, lowers the boiling point and its performance.

So TRW brake fluids have been developed to maintain their performance in use for as long as possible. However, for maximum safety and braking performance, TRW recommend: Brake Fluid to be changed at least every 2 years!

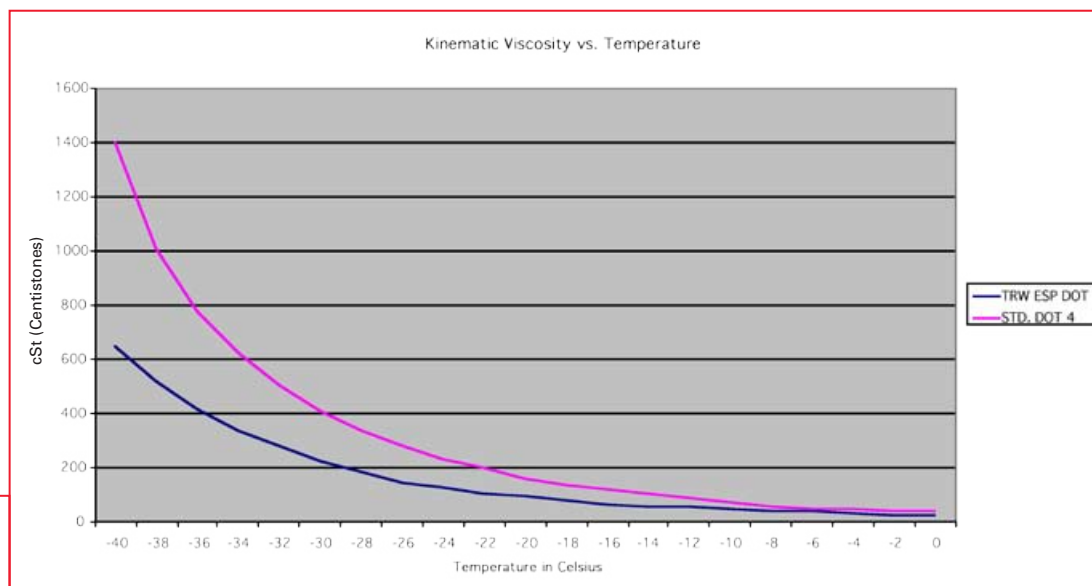
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Brake Fluid for ESP Systems PFB 440!

ESP is probably the best technological breakthrough in terms of active safety of these last few years. Accident statistics are there to prove it. As a global leader in safety, TRW designs and mass produces such systems. TRW Aftermarket offers a brake fluid specially designed so you get the best out of your ESP System in all conditions. Indeed PFB440 keeps its viscosity even at extremely low temperatures (see graph, right hand) so there is no impairment to the system reaction speed.

Safety first with PFB 440!



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SSF Synthetic Steering and Suspension Fluid PFS801

This product is suitable for use in the steering and suspension system of the Citroen C5 and other vehicles for which the same product is specified. The product also meets the following requirements:

Test	Method	Units	Specification
Colour	Visual	–	Light Orange
Appearance	Visual	–	Clear
Equilibrium Reflux Boiling Point	IP123	o C.	235 min.
Kinematic Viscosity at -40 o C.	NFT 60-100	cSt	900 – 1100
Kinematic Viscosity at 100 o C.	NFT 60-100	cSt	6 min.
Flash Point (Closed Cup)	IP 34	o C.	120 min.
Pour Point	IP 15	o C.	-50 max.
Viscosity Index	IP 226	–	330 min.
Water Content	ML/0004	–	No Crackle



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PFG110 to make life more simple

To make life more simple we improved the Brake Grease PFG110. PFG110 supersedes

- PFG101 except shoe sliding area on back plates *see next page
- PFG102
- PFG106

You can use the specially developed grease for:

- all mechanical asserted units like adjusters
- for all hydraulic rubber parts, which are in contact with Brake Fluid DOT 3, DOT 4 and DOT 5.1
- for plain bearings e.g. in brake and clutch systems for linear motions in contact with Brake Fluid DOT 3, DOT 4 and DOT 5.1
- Guide bushes and guide pins
- Clutch master and slave cylinders

You should not use it for:

- in context with aluminium or aluminium under dynamically high load conditions
- Brake pad supports in disc Brake Caliper
- for back plate shoe sliding area

The product offers:

- Excellent wear protection
- High load carrying capacity
- Good adhesion
- Resistance to water
- Corrosion protection

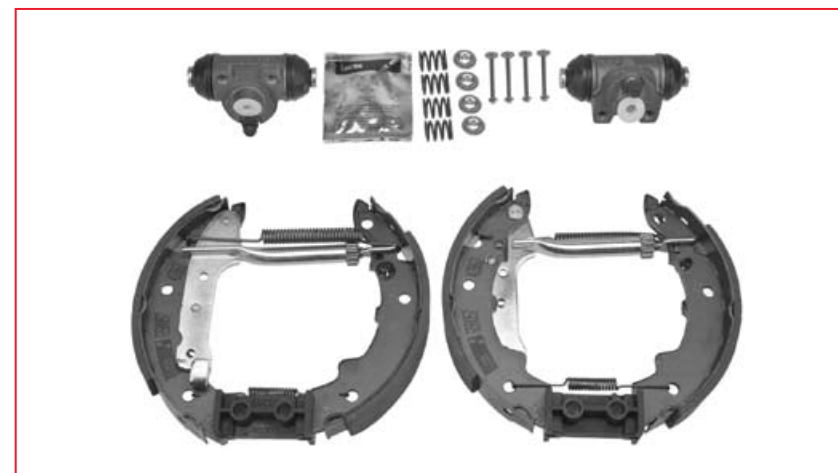


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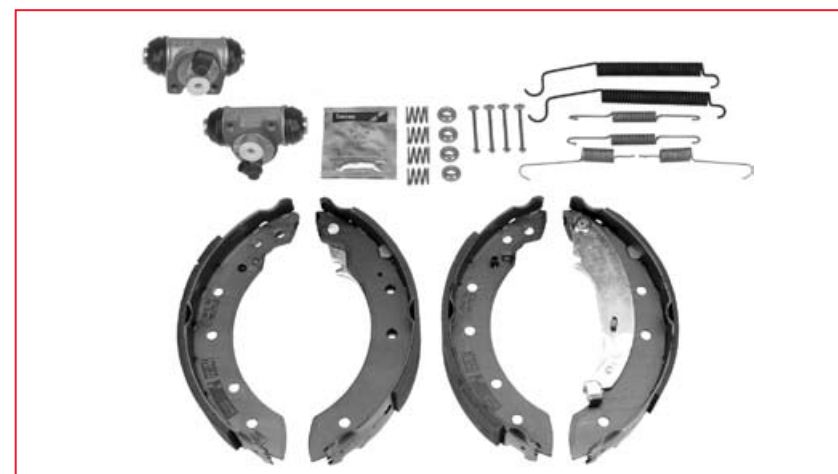
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*Instead of PFG101 We provide for shoe sliding areas a special grease packed within the box.

You'll find the 3 g sachet in our Brake Kits (BK) Superkits (GSK)



GSK1032



BK1141

