Brake Fluids

With most vehicles the brake fluid must be changed every two to three years because the fluid is extremely hygroscopic which means it absorbs water from the atmosphere It is drawn through the rubber brake lines.
If you don't replace the brake fluid this causes rust in the braking system, which can damage the piston seals and rear pistons causing leaking and loss of braking, thus resulting in an accident or death.

"As with every other fluid in your car, brake fluid contains a main ingredient along with protective additives. The main ingredient in brake fluid doesn't degrade, but the additives do. The most important additive is a corrosion inhibitor. The corrosion inhibitor prevents internal rusting of steel brake lines, callipers and ABS (antilock brake system) components. Once the inhibitors are exhausted, even minute amounts of moisture can cause dangerous and costly corrosion".

It is recommended that this is done by an experienced Automotive Technician because most late model cars have Anti Lock Braking Systems which also store brake fluid this must be flushed out by using a On Board Diagnostic Machine to operate the ABS Unit to flush old brake fluid and push new brake fluid in to this unit.
Water in the brake fluid reduces the boiling point of the fluid so if you are towing your brake fluid boils then you can have air bubbles in the braking system this means the brake pedal can go to the floor.

There is eight different types of brake fluid, using the incorrect fluid can be dangerous.
Always check with your service Technician for the correct Brake Fluid type
e.g.: Ford uses Super Dot 4.1
Toyota uses Dot 3.0 and Dot 4.0 but not Super Dot4.1 this is critical seals do not work with this type of brake fluid
This is why using the Wrong Brake Fluid can be Fatal.
Some people like to use Silicon Brake fluid this can be used when rebuilding the car's braking system to stop Corrosion in the braking system.
The silicon brake fluid is Not Hygroscopic which means it does not absorb water from the atmosphere.

	Dry boiling point	Wet boiling point[a]	Viscosity at -40 °C°F	Viscosity at 100 °C (212 °F)	Primary constituent
DOT 2	190 °C (374 °F)	140 °C (284 °F)	?	?	castor oil/alcohol
DOT 3	205 °C (401 °F)	140 °C (284 °F)	≤ 1500 mm^2/s	≥ 1.5 mm^2/s	glycol ether
DOT 4	230 °C (446 °F)	155 °C (311 °F)	≤ 1800 mm^2/s	≥ 1.5 mm^2/s	glycol ether/borate ester
DOT 4+	230 °C (446 °F)	155 °C (311 °F)	≤ 750 mm^2/s	≥ 1.5 mm^2/s	glycol ether/borate ester
LHM+	249 °C (480 °F)	249 °C (480 °F)	≤ 1200 mm^2/s[14]	≥ 6.5 mm^2/s	mineral oil
DOT 5	260 °C (500 °F)	180 °C (356 °F)	≤ 900 mm^2/s	≥ 1.5 mm^2/s	silicone
DOT 5.1	260 °C (500 °F)	180 °C (356 °F)	≤ 900 mm^2/s	≥ 1.5 mm^2/s	glycol ether/borate ester
DOT 5.1 ESP	260 °C (500 °F)	180 °C (356 °F)	≤ 750 mm^2/s	≥ 1.5 mm^2/s	glycol ether/borate ester

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