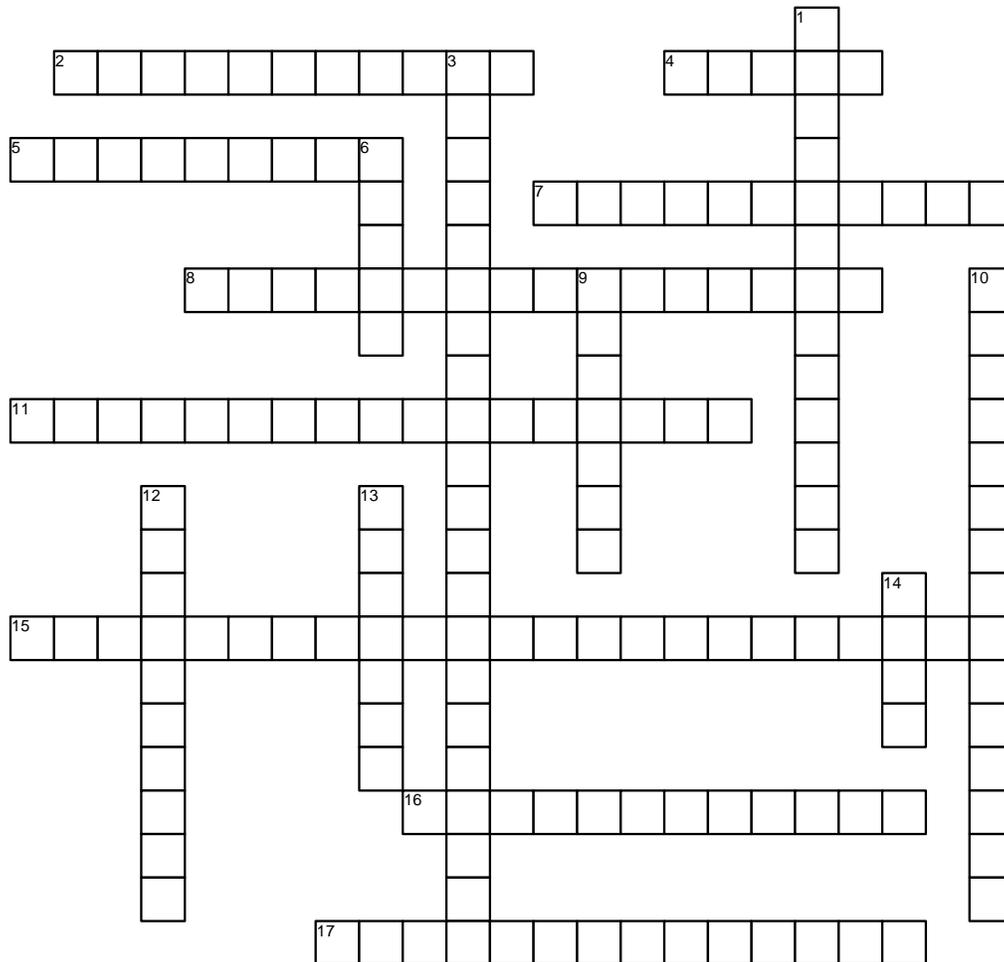


# Coolant

## Chapter 20



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### ACROSS

- 2 \_\_\_\_\_ is a chemical reaction that takes place between coolant additives and the metal that it protects.
- 4 \_\_\_\_\_ is half of the coolant and can have an effect on the corrosion protection of coolant due to variations in its quality, which is of ten unknown.
- 5 When testing for pH, use either a \_\_\_\_\_ or a pH meter.
- 7 \_\_\_\_\_ is a chemical reaction that takes place between coolant additives and the metal that it protects.
- 8 \_\_\_\_\_ is the flow of an electrical current as a result of two different metals in a liquid, which acts like a battery.

- 11 \_\_\_\_\_ has a small amount of a substance that makes it taste bitter and therefore not appealing to animals.
- 15 \_\_\_\_\_ is conventional coolant that has been used for over 50 years.
- 16 \_\_\_\_\_ requires the use of an outside voltage source.
- 17 All manufacturers recommend the use of \_\_\_\_\_ based coolant.

### DOWN

- 1 A \_\_\_\_\_ is a tester used to test the freezing point of coolant by placing a few drops of coolant on the prism surface.
- 3 \_\_\_\_\_ coolant contains ethylene glycol, but does

- not contain silicates or phosphates.
- 6 \_\_\_\_\_ is used in Mazda-based Fords, same as Mazda FL-22, and is ethylene glycol based.
- 9 \_\_\_\_\_ is used in the cooling system due to the fact that it will transfer heat from the engine to the radiator.
- 10 When measuring for acidity or alkalinity a \_\_\_\_\_ or PH scale is utilized.
- 12 The \_\_\_\_\_ measures the density of the coolant.
- 13 \_\_\_\_\_, developed by Havoline, is just one brand of OAT coolant, which has been used in GM vehicles since 1996.
- 14 \_\_\_\_\_ is similar to the OAT-type antifreeze as it uses organic acid salts that are not abrasive to water pumps, yet provide the correct pH.