



## FREQUENTLY ASKED QUESTIONS

### GENERAL QUESTIONS

**REFER TO THE BACK PAGE FOR THE ANTIFREEZE REFERENCE CHART TO FIND OUT WHICH ANTIFREEZE TO USE IN YOUR VEHICLE.**

**Q: Why is it important to mix antifreeze with water?**

**A:** Antifreeze contains chemicals that protect your engine against rust and corrosion, as well as freeze-up and boil over protection. Water is required to activate the chemicals in the inhibitor package. Furthermore, adding water to antifreeze actually increases the freeze-up and boil over protection provided. For example, a mix of 40% antifreeze and 60% water provides freeze-up protection down to  $-23^{\circ}\text{C}$  and boil over protection up to  $126^{\circ}\text{C}$ . In comparison, a mix of 70% antifreeze and 30% water provides freeze-up protection down to  $-52^{\circ}\text{C}$  and boil over protection up to  $132^{\circ}\text{C}$ . However, we do not recommend adding more than 70% antifreeze. This would limit the corrosion and freeze up protection and heat transfer capabilities of the antifreeze.

**Q: Can I mix ordinary tap water with antifreeze?**

**A:** Yes, tap water is commonly used for mixing with antifreeze, however, deionized water or distilled water is preferred. Do not use water softened with salts to mix with antifreeze.

**Q: Why does my vehicle owner's manual recommend phosphate free antifreeze?**

**A:** Some European car manufacturers recommend that phosphate free antifreeze be used in their vehicles. The reason is that the water in Europe has an extremely high mineral content. If you mixed an antifreeze containing phosphates, which are part of the corrosion inhibitor package, with the water they have in Europe, the phosphates in the antifreeze may "drop out" and form deposits in your cooling system that can lead to corrosion. However, this is not a major concern in many other countries, since our water is lower in mineral content, or softer, than European water. If you are interested in phosphate-free antifreeze, we offer PEAK Global LifeTime Antifreeze and SIERRA, the Safer Antifreeze.

**Q: What makes SIERRA Antifreeze safer?**

**A:** SIERRA Antifreeze is a premium quality, propylene glycol (PG) based antifreeze that provides engine protection comparable to that provided by premium conventional ethylene glycol (EG) based coolants. However, because of its PG formulation, SIERRA Antifreeze is less toxic than conventional EG based antifreeze and, therefore, safer to pets, people and wildlife in cases of spills, leaks, boil-over, or careless disposal.

**Q: Can I mix SIERRA Antifreeze with an ethylene glycol based antifreeze?**

**A:** SIERRA Antifreeze is compatible with ethylene glycol based (EG) antifreeze. If they are accidentally mixed, no damage to the cooling system will occur. However, due to the toxicity of the EG antifreeze, mixing antifreeze will eliminate the safety advantages of SIERRA Antifreeze.

**Q: What is the shelf life of antifreeze?**

**A:** If the product is still in the original sealed container, then it has a shelf life of many years. We recommend that antifreeze be used within one year of purchase.

**Q: What is the proper mixture of antifreeze to water for adequate freeze protection in my area?**

**A:** While temperatures and climates vary, most vehicles can use our conventional antifreeze protection chart.

**Q: Where can I obtain details about the limited lifetime warranty for PEAK Global Lifetime?**

**A:** You may obtain "Lifetime" Antifreeze & Cooling System Limited Warranty at [www.smitsgroup.co.nz](http://www.smitsgroup.co.nz)

