

Sierra Antifreeze



**BY NIKKY SOUTHERLAND
AND DANIAL BORDER**



Sierra Antifreeze

- Antifreeze- chemical substance added to a liquid to lower its freezing point. It prevents the freezing of the coolants (a substance, usually a liquid, used to prevent overheating in an engine or other mechanism) used in airplane, automobile, and tractor engines, in refrigeration liquids, and in melting agents.
- Sierra antifreeze was founded over thirty years ago. It is a propylene glycol based coolant. It works just the same as ethylene glycol based coolants, only it's much safer for the environment.

Safety of Sierra

- 2 ounces of ethylene glycol antifreeze (the stuff that's not sierra) can kill a dog. One teaspoon can be lethal to a cat, and 2 tablespoons can be lethal to a child. To the left you can see an ethylene glycol distillation system.
- **Sierra antifreeze is less toxic and safer for children, pets, and wildlife. Propylene glycol (the chemical used in sierra) is used in many consumer products including cosmetics, food, and certain medications.**



Technical

Bibliography

- "^. "Microsoft® Encarta® encyclopedia 2001. © 1993-2000 Microsoft corporation. All rights reserved.
- "Antifreeze."Microsoft® Encarta® encyclopedia 2001. © 1993-2000 Microsoft corporation. All rights reserved.

- The Quiet Giant company has many products using chemicals. Quiet Giant is the mother company of Sierra Antifreeze, so the product hasn't really changed except that Quiet Giant made it a safe antifreeze rather than a normal type.
- It makes out lives easier