

LCB File No. R200-01

PROPOSED REGULATION OF THE STATE DEPARTMENT OF AGRICULTURE

(This regulation is part of the original Initial Draft of R176-01 posted on 11/28/01)

ANTIFREEZE

NAC 590.010 Specifications for antifreeze. (NRS 233B.040, 590.400) Except as otherwise provided in NAC 590.030:

1. The specifications for antifreeze based on ethylene glycol or propylene glycol contained in volume 15.05, Engine Coolants, of the 2000 Annual Book of American Society for Testing and Materials (ASTM) Standards, ASTM designation D3306-00a, are hereby adopted by reference. Any subsequent edition shall be deemed approved by the board unless the edition is disapproved by the board within 60 days after the date of publication.

~~2. The specification for antifreeze based on propylene glycol contained in volume 15.05, Engine Coolants, of the 1997 Annual Book of American Society for Testing and Materials (ASTM) Standards, ASTM designation D5216-95, are hereby adopted by reference.~~

2. The chemical and physical properties of any antifreeze other than those classified in subsection 1 must be:

Table with 2 columns: Property and Value. Properties include Water, mass % (5 max), Specific gravity 60°F/60°F (1.11 to 1.15), pH (33% by volume) (7.5 to 11), Equilibrium boiling point (300°F min), Freezing point, 50% by volume (-34°F max), Foaming test (Increase in volume at 5 minutes: 150 ml max, Break time: 5 sec max).

3. In addition to the properties listed in subsection 2, any antifreeze other than those classified in subsection 1 must meet the following specifications for corrosion (loss of weight per specimen):

Table with 2 columns: Material and Corrosion Limit. Materials include Copper (10 mg max), Solder (20 mg max), Brass (10 mg max), Steel (10 mg max), Cast iron (10 mg max), Aluminum (30 mg max).

NAC 590.030 Standards for prediluted antifreeze. (NRS 233B.040, 590.400) The minimum standards of chemical and physical properties for an antifreeze which:

- 1. Is labeled as prediluted antifreeze; and
2. Displays prominently on the front label the words "DO NOT ADD WATER," contained in volume 15.05, Engine Coolants, of the 2000 Annual Book of American Society for Testing and Materials (ASTM) Standards, ASTM designation D4656-95 D3306-00a, are hereby adopted by reference.

**NAC 590.035 Availability of volume 15.05, Engine Coolants, of ~~[1998]~~ 2000 Annual Book of American Society for Testing and Materials Standards. (NRS 233B.040, 590.400)**

Volume 15.05, Engine Coolants, of the ~~[1998]~~ 2000 Annual Book of American Society for Testing and Materials (ASTM) Standards, *and any subsequent edition*, is available for inspection at the office of the State Department of Agriculture, 350 Capitol Hill Avenue, Reno, Nevada 89502. The volume may be purchased at a cost of ~~[\$89]~~ \$140 from the American Society for Testing and Materials, 100 Barr ~~[Harber]~~ Harbor Drive, West Conshohocken, Pennsylvania 19428.

***NAC 590.XXX Equivalent Test Methods***

***1. Whenever this section provides for the use of a specified test method, another test method may be used following a determination by the state sealer of weights and measures that the other method produces results equivalent to the results with the specified method. An ASTM approved method that has not yet been published would meet the appropriate criteria.***