ENGINE COOLANT AND ANTIFREEZE BITTERING AGENT ACT OF 2005

REPORT

OF THE
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ON
S. 1110
together with
MINORITY VIEWS

MARCH 14, 2006.—Ordered to be printed
Mr. STEVENS, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

together with

MINORITY VIEWS

[To accompany S. 1110]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1110) to amend the Federal Hazardous Substances Act to require engine coolant and antifreeze to contain a bittering agent in order to render the coolant or antifreeze unpalatable, having considered the same, reports favorably thereon with amendments and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

The purpose of the Engine Coolant and Antifreeze Bittering Agent Act of 2005, as reported, is to reduce the number of antifreeze poisonings in children and animals through the addition of denatonium benzoate to ethylene glycol-based engine coolant and antifreeze products.

BACKGROUND AND NEEDS

The bill would amend the Federal Hazardous Substances Act (FHSA), under which the Consumer Product Safety Commission (CPSC) has the authority to regulate engine coolant and antifreeze. Three States already require the addition of denatonium benzoate

\[^{1}\text{15 U.S.C. 1261–1278}\]
in antifreeze. Denatonium benzoate is an aversive agent which im-
parts an extremely bitter taste upon contact with the tongue. With
a number of States considering mandates to add bitterant to anti-
freeze, there is a concern that inconsistent State laws would force
manufacturers into creating several different formulations, thereby
affecting the production of engine coolant and antifreeze products.
This legislation would set forth one national standard for the pro-
duction of embittered engine coolant and antifreeze products.
Ethylene glycol based antifreeze is a hazardous substance with
a sweet taste. Animals (particularly dogs) are drawn to ingest the
liquid, which can be lethal in small doses. An estimated 10,000
dogs and cats are poisoned by antifreeze each year.\textsuperscript{2} Children are
also potential victims of antifreeze poisoning. A 1998 study by the
American Association of Poison Control Centers (AAPCC) found
that 801 children that year had been exposed to, or poisoned by,
ethylene glycol, the primary active ingredient in many engine cool-
ant and antifreeze products sold to consumers.\textsuperscript{3} More recently, ac-
cording to the 2003 AAPCC Annual Report, there were 592 ethyl-
ene glycol poisonings of children under 6, and 803 in children be-
tween 6 and 19.\textsuperscript{4}

By requiring the addition of denatonium benzoate to antifreeze,
this bill would reduce the possibility that a child or animal is
drawn to accidentally ingest a deadly amount of antifreeze. This
aversive method also has been used to deter ingestion of a mul-
titude of other consumer products, including deer repellant, nail
polish, household cleaners, paints, windshield washing fluid, and to
colot electrical cables.\textsuperscript{5}

The bill’s mandate addresses two substances, ethylene glycol and
denatonium benzoate.

Ethylene Glycol

Ethylene glycol is a toxic, clear, colorless, and sweet tasting liq-
uid that is used as the primary compound in the majority of engine
coolant and antifreeze products. Due to the inherent sweet taste of
ethylene glycol, improper disposal or leakage of antifreeze in non-
commercial settings has raised concerns that unsecured ethylene
glycol-based antifreeze poses an unnecessary health risk to both
children and animals. Child resistant safety caps are already used
by antifreeze manufacturers to prevent injuries. The addition of
denatonium benzoate as a bittering agent could reduce even fur-
ther the number of incidents connected to ethylene glycol poi-
soning.

Denatonium Benzoate

Denatonium benzoate is a bittering agent/additive commonly dis-
tributed in the United States under the brand name of Bitrex. According
to the California Institute of Technology’s Center for
Science and Engineering of Materials, denatonium benzoate is rec-

\textsuperscript{2} Washington State University Veterinary Medical School, cited by U.S. Conference of Mayors,
Mayor Martin Chavez (Albuquerque, NM), '‘Bittering Agent Makes for Safer Kids, Wildlife and
Pets,’’ www.usmayors.org/uscm/us_mayor_newspaper/documents/06_07_04/bittering.asp,
\textsuperscript{3} See AAPCC Website, ‘‘1998 Pediatric Exposures,’’ http://aapcc.org/, Accessed December 9,
2005.
\textsuperscript{4} See 2003 AAPCC Annual Report, Table 22A, ‘‘Ethylene Glycol,’’ www.aapcc.org/poison1.htm,
\textsuperscript{5} Bitrex Website A Product of McFarlan Smith, ‘‘List of Applications,’’ http://www.bitrex.com/
ognized as the most bitter substance known. In minute quantities, denatonium benzoate can render household, garden, or automotive products unpalatable, thereby deterring ingestion by children and animals.6

SUMMARY OF PROVISIONS

S. 1110 is a product safety measure that would require manufacturers of engine coolant and antifreeze products to add a bittering agent so as to render those products unpalatable to children and animals. To ensure that the bittering agent would not present unreasonable adverse effects to the environment, the introduced version of S. 1110 was amended to include an environmental evaluation by the CPSC. The revised bill would preempt State law, instituting a national standard for the production and distribution of engine coolant and antifreeze products sold in non-wholesale containers. Additionally, assigned liability provisions in the bill would ensure that manufacturers of antifreeze, denatonium benzoate, and alternative bittering agents could be held liable for harm caused by their respective products. In recognition of the possibility that new bittering agents may become available, the CPSC would be authorized to approve the use of alternative bittering agents through rulemaking. However, Commission approval of the use of alternative bitterants in antifreeze would be contingent upon the alternative being found to be as effective as denatonium benzoate, both in terms of its bittering capacity and compatibility with motor vehicle engines, and that it would not cause an unreasonable adverse effect on the environment.

LEGISLATIVE HISTORY


On July 18, 2005, the Subcommittee on Consumer Affairs, Product Safety, and Insurance held a hearing on S. 1110. A diverse group of Federal and State government officials, companies, associations, and private parties with expertise in regard to bittering antifreeze appeared before the Committee.

On November 17, 2005, the Committee on Commerce, Science, and Transportation considered the bill in open Executive Session. Chairman Stevens offered an amendment. The Committee adopted the amendment by a voice vote with Senator Boxer, Senator Nelson of Florida, Senator Cantwell, and Senator Lautenberg asking to be reported as voting “no” on the amendment and the underlying legislation. The Committee ordered S. 1110 be reported with amendments.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget

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Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

**DECEMBER 14, 2005.**

Hon. TED STEVENS,
Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1110, the Engine Coolant and Antifreeze Bittering Agent Act of 2005.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Geoffrey Gerhardt.

Sincerely,

DOUGLAS HOLTZ-EAKIN.

Enclosure.

S. 1110—Engine Coolant and Antifreeze Bittering Agent Act of 2005

S. 1110 would direct the Consumer Product Safety Commission (CPSC) to issue regulations requiring the use of a bittering agent in antifreeze and other engine coolants. The purpose of the bittering agent would be to make antifreeze unpalatable to humans and animals. Prior to issuing its regulations, the CPSC would be required to conduct an environmental impact evaluation in conjunction with the Environmental Protection Agency. The bill would require the CPSC to ensure that manufacturers comply with the new regulations, and maintain compliance records. Based on information provided by the CPSC, CBO estimates that implementing S. 1110 would increase spending subject to appropriation by less than $500,000 annually.

The legislation would preempt state laws that require the addition of bittering agents in antifreeze and would establish a uniform federal standard. The bill also would limit liability claims associated with the addition of bittering agents to antifreeze. The preemption and the limitation on liability would be intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Although the preemption would limit the application of state law, it would not impose a duty on states that would require additional spending. The liability protection would be narrow in scope—providing protection primarily to manufacturers and other entities involved in distributing antifreeze that includes a bittering agent. CBO is unaware of any current or pending case that would be affected by the bill; consequently, we estimate that the costs of the mandates would be small and would not exceed the threshold established in UMRA ($62 million in 2005, adjusted annually for inflation).

S. 1110 contains private-sector mandates as defined in UMRA on manufacturers of engine coolant and antifreeze that distribute their products to be sold by retail businesses. In the event that the CPSC finds evidence that the use of the bittering agent denatonium benzoate (or a comparable alternative) has no “unreasonable adverse effect on the environment,” those manufacturers would be required to:

- Add denatonium benzoate to their product mixtures that are comprised of more than 10 percent ethylene glycol; and
• Keep detailed records of any bittering agents used in their products.

CBO estimates that the aggregate direct costs of complying with those mandates would be minimal compared to the annual threshold established by UMRA for private-sector mandates ($123 million in 2005, adjusted annually for inflation).

Under S. 1110, if the CPSC determines that the use of the bittering agent in engine coolant or antifreeze would have no adverse effects on the environment, coolant and antifreeze manufacturers would be required to add the agent to certain product mixtures. The bill would exempt coolant and antifreeze distributed to original manufacturers (such as motor vehicle manufacturers) and garages that purchase wholesale engine coolant or antifreeze for purposes other than retail sales. According to industry sources, about 160 million gallons of coolant and antifreeze are sold in the U.S. retail market each year. Industry and government sources indicate that adding the bittering agent to product mixtures would cost manufacturers less than $0.03 per gallon of coolant or antifreeze. Furthermore, the industry expects to incur some costs associated with upgrades necessary for storing denatonium benzoate at manufacturing plants. Industry sources estimate such costs to fall between $50,000 and $70,000 per plant. Based on those data, CBO estimates that the costs associated with this mandate would not exceed $6 million per year.

Also, contingent upon the CPSC’s determination, coolant and antifreeze manufacturers would be required to record the trade name, scientific name, and any active ingredient of any bittering agent used in product mixtures. The bill also would require manufacturers to make those records available to the public. Since manufacturers would already have such information, CBO expects the costs associated with such record keeping to be minimal.

The CBO staff contacts for this estimate are Geoffrey Gerhardt (for federal costs), Leo Lex (for the state and local impact), and Craig Cammarata (for the private-sector impact). This estimate was approved by Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

S. 1110 would require the CPSC, in consultation with the EPA and appropriate State and local officials in California and Oregon, to perform an evaluation to determine whether the inclusion of denatonium benzoate in engine coolant and antifreeze has caused any unreasonable adverse effects on the environment in the foregoing States. Because the CPSC already regulates the proper labeling of engine coolant and antifreeze, the number of persons covered by this bill should be consistent with levels impacted under current Federal standards related to the regulation of engine coolant and antifreeze. The evaluation will not include new animal or human
testing, so the necessary resources for concluding such an evaluation are significantly reduced.

ECONOMIC IMPACT

S. 1110 is not expected to have an adverse impact on the nation’s economy. Rather, the imposition of one national standard for the production of engine coolant and antifreeze will avoid market inefficiencies that could have resulted if each State regulated the production of the particular products. The antifreeze industry, up to this point, has borne the cost of adding denatonium benzoate to engine coolant and antifreeze. The estimated cost of adding denatonium benzoate to antifreeze is minimal, approximately “two or three cents a gallon [of antifreeze].”

PRIVACY

S. 1110 would have minimal effect, if any, on the privacy rights of individuals.

PAPERWORK

The Committee does not anticipate a major increase in paperwork burdens for private industry resulting from the passage of this legislation. In those areas where the bill would require additional paperwork, it is aimed at providing consumers with the right to petition manufacturers of engine coolant or antifreeze for a record of any bittering agents used in the relevant products. A certain amount of additional paperwork, however, would result from the bill’s mandate for the CPSC to evaluate bittering agents used in California and Oregon. The CPSC would publish in the Federal Register its findings from this evaluation within 90 days after enactment of the Act.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title.

Section 1 sets forth the short title of the bill as the “Engine Coolant and Antifreeze Bittering Agent Act of 2005.”

Section 2. Addition of bittering agent in antifreeze.

Section 2 of this bill would amend FHSA by adding section 25 to FHSA, which would establish a national standard for the production and distribution of engine coolant and antifreeze products by requiring the addition of a bittering agent.

Section 25(a)(1)(A–C) would require the CPSC, in consultation with EPA and State and local officials in California and Oregon, to evaluate whether evidence exists of any unreasonable adverse effect on the environment resulting from the addition of denatonium benzoate in engine coolant and antifreeze products.

Section 25(a)(2)(A) would require all antifreeze products containing more than 10 percent ethylene glycol to have a chemical concentration of at least 30–50 parts per million of the bittering agent denatonium benzoate. The 10 percent threshold would cover

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all off-the-shelf, retail antifreeze products made with ethylene glycol.

Section 25(a)(2)(B) would allow for additional bittering agents to enter the market if the CPSC decides, through a rulemaking, that an alternative additive is as effective as denatonium benzoate and does not present an unreasonable adverse effect to the environment.

Section 25(a)(3) defines “unreasonable adverse effect” as that which poses an unreasonable risk to human health or the environment, after taking into account economic, social, and environmental costs and benefits.

Section 25(a)(4) would establish that any antifreeze product manufactured without denatonium benzoate or an approved alternative be considered a banned hazardous substance. The CPSC would have the authority to impose penalties on manufacturers of antifreeze that fail to add the bittering agent. If the omission is purposeful, or a repeat offense, the CPSC could fine a manufacturer up to $500,000 when a human death occurs, under current regulations.7

Section 25(b) would require antifreeze manufacturers to maintain a record, available to the public upon request, of the antifreeze product trade name, a record of the scientific name (ethylene glycol), and a compilation of any active ingredients of the relevant bittering agent (denatonium benzoate).

Section 25(c) would assign liability to manufacturers, processors, distributors, recyclers, or sellers of engine coolant and antifreeze products, manufacturers and distributors of denatonium benzoate, and manufacturers and distributors of any alternative bittering agent. It would establish assigned liability based upon which product, i.e., antifreeze, denatonium benzoate, or alternative bittering agent, is proven to have caused personal injury, death, property damage, damage to the environment (including natural resources), or economic loss. If the injury, death, damage, or loss stems from the inclusion of denatonium benzoate in an engine coolant or antifreeze product, the manufacturer, processor, distributor, recycler, or seller of the engine coolant or antifreeze product would not be held liable. The bill would not afford any protection from liability to manufacturers and distributors of denatonium benzoate or alternative bittering agents.

Section 25(d) would preempt all State or political subdivision statutes and regulations that prohibit, limit, standardize, or impose any requirement different from the Federal standard set forth by this Act.

Section 25(e) would exempt sales of motor vehicles that contain engine coolant or antifreeze, or sales of wholesale containers of engine coolant or antifreeze containing more than 55 gallons of antifreeze, from the Federal standard imposed by this Act.

7 15 U.S.C. 1264
S. 1110, the Engine Coolant and Antifreeze Bittering Agent Act of 2005, undermines the "polluter pays" principle by including broad liability waivers; supporting the use of a chemical, denatonium benzoate, which could threaten public health and environmental quality, including drinking water supplies; undercutting pollution prevention efforts; promoting a product of questionable effectiveness; and preempting State protections. Congress recently rejected oil industry supported efforts to enact legislation limiting polluters' liability for the clean up of methyl tertiary butyl ether, or "MTBE" that contaminates water supplies. S. 1110 raises similar concerns.

S. 1110 contains a waiver of liability for the manufacturers, processors, distributors, recyclers, and sellers of engine coolant or antifreeze that contains denatonium benzoate, or "DB." This waiver provides protection for these commercial entities from liability for any personal injury, death, property damage, environmental damage (including natural resources) or economic loss related to DB in engine coolant or antifreeze.

The parallels between DB and MTBE are striking. Both chemicals exhibit properties that increase risks of groundwater contamination. According to the U.S. Environmental Protection Agency (EPA), there is insufficient information available to assess the safety of DB. While the EPA acknowledged a lack of data, the Agency promulgated a Risk Potential Profile for Bitrex, a commercial brand of DB. The data for the profile was extrapolated from a related chemical, not from an examination of DB itself. The EPA predicted from this profile that DB is water soluble; expected to resist biodegradation; and expected to show the greatest movement in groundwater when applied to sandy soil. The EPA emphasizes that "this analysis should not be construed to be an Agency position on the health and safety of Bitrex [DB]. As stated, not enough information is available to the Agency at this time to make such a finding."

All of these factors are especially troubling given that S. 1110 will likely trigger a substantial expansion in the production, use, and disposal of DB. This raises serious concerns because coolant is frequently disposed of down drains, where it flows into waste water treatment plants, or simply dumped onto the ground. Manufacturers of DB note that it is the bitterest substance known to man. Thus, even if DB was actually safe for consumption, its potential to ruin drinking water supplies should be obvious. Congress needs to consider very carefully whether introducing DB into car radiators throughout the United States is sound environmental policy at a time when our drinking water supplies are already limited and in danger of contamination from a variety of pollution sources.
Doing so with a liability waiver only increases the potential for disastrous results.

S. 1110 also benefits manufacturers of coolant or antifreeze that decide to use toxic ingredients in their products, rather than promoting existing non-toxic alternatives. Many antifreeze and coolants are toxic because their manufacturers use ethylene glycol. Other manufacturers sell coolant or antifreeze with propylene glycol, a non-toxic substance that meets the American Society for Testing and Materials’ standards for coolants. The Agency for Toxic Substances and Disease Registry states that “large amounts of ethylene glycol can damage the kidneys, heart and nervous system. [Yet], [p]ropylene glycol is generally regarded as safe for food.”

The Federal government should support the use of the least toxic alternative or non-toxic coolants, (such as propylene glycol) that will eliminate the cause of poisonings, instead of limiting the liability of manufacturers of a potentially dangerous chemical.

Perhaps most importantly, the introduction of DB into millions of automotive radiators throughout the United States is unlikely to prevent accidental poisoning from ethylene glycol. The legislation’s favorable treatment of toxic, ethylene glycol based products and promotion of bittering agents, including DB is especially unwise because studies have questioned the effectiveness of bittering agents in reducing poisonings in children and animals. In 2004, the Oregon Poison Control Center concluded:

The first law mandating addition of DB was never necessary, as unintentional [ethylene glycol] or [methanol] exposures in pre-school age children did not cause measurable toxicity. The mandatory addition of DB to automotive products has produced no measurable reduction in unintentional pediatric toxic alcohol exposures in Oregon. There is no compelling reason to consider similar legislation in other jurisdictions.”

The Congressional Research Service also noted that a “recent review concluded that with respect to carnivores, ‘products that contain denatonium derivatives . . . are ineffective repellents, almost regardless of species.’” Even industry-sponsored studies “indicate that BITREX did not impart any aversive properties to antifreeze.”

In contrast, a study from the University of California at Davis on the efficacy of animal repellents concluded, “[generally, products which have repeatedly demonstrated good efficacy in our trials are those products that produce sulfurous odors.”

S. 1110 would prevent the States from developing laws that conflict with its provisions. Thus, S. 1110 would not allow a State to

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2 Michael E. Mullins (Division of Emergency Medicine, Washington University School of Medicine, St. Louis, Missouri) and B. Zane Horowitz (Oregon Poison Center, Oregon Health Sciences University, Portland, Oregon), Was it Necessary to Add Bitrex (Denatonium Benzoate) to Automotive Products?, 46 Vet. Hum. Toxicol. 150, 151, 152 (2004).
enforce a requirement that manufacturers use an “aversive” agent in toxic coolant, rather than a “bittering” agent. This preemption provision would apply even though studies have found that alternative aversive agents may be more efficacious than bitter tasting substances. The Federal government should not enact legislation that strips away the ability of a State to better protect the health and safety of its citizens.

S. 1110 also requires that the Consumer Product Safety Commission (CPSC) conduct an evaluation, including a cost benefit analysis, within 30 days of enactment that analyzes whether the “use” of DB has any “unreasonable adverse effects.” The CPSC must conduct a similar evaluation on future bittering agents used in lieu of DB. S. 1110 defines “unreasonable adverse effects” to mean “an unreasonable risk to human health or the environment, taking into account the economic, social, and environmental costs and benefits.”

As an initial matter, Congress should not require a substance without knowing whether it has “unreasonable adverse effects,” particularly in conjunction with a liability waiver. There are other serious problems with the CPSC provision, including the choice of the CPSC and its use of cost-benefit analysis. The CPSC does not have sufficient expertise in assessing the environmental fate, transport, and effect of chemicals. Nor does the CPSC have sufficient expertise in determining the human health effects of chemical pollutants. Moreover, the CPSC cannot effectively assess a chemical’s effect on wildlife, drinking water supplies, water treatment plants and a myriad of other factors implicated by the use of DB. Mere consultation with EPA and the States of Oregon and California is not a sufficient substitute for critical expertise, in that the EPA already determined that existing data is insufficient to evaluate the effect of DB on health and safety.

Coolant and antifreeze manufacturers should remain fully responsible for their products, including the damages they cause. S. 1110 undercuts this basic requirement.
CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

FEDERAL HAZARDOUS SUBSTANCES ACT

SEC. 25. ADDITION OF BITTERING AGENT IN ANTIFREEZE.

(a) BITTERING AGENT.—

(1) ENVIRONMENTAL EVALUATION REQUIRED.—

(A) IN GENERAL.—Within 30 days after the date of enactment of the Engine Coolant and Antifreeze Bittering Agent Act of 2005, the Consumer Product Safety Commission shall commence an evaluation, in consultation with the Environmental Protection Agency and appropriate State health and environmental officials in Oregon and California, to determine whether there is evidence that the use of the bittering agent denatonium benzoate in engine coolant or antifreeze has an unreasonable adverse effect on the environment.

(B) CERTAIN TESTS MAY NOT BE USED.—The evaluation may not include any new animal or human testing.

(C) DEADLINE.—The Commission shall complete the evaluation within 90 days after the date of enactment of that Act and publish its findings in the Federal Register.

(2) USE OF BITTERING AGENT.—

(A) IN GENERAL.—Unless the Commission, in its evaluation under paragraph (1), finds there is evidence of an unreasonable adverse effect on the environment, any engine coolant or antifreeze that is manufactured on or after the date that is 180 days after the date of publication of the Commission’s finding in the Federal Register, and that contains more than 10 percent ethylene glycol, shall include not less than 30 parts per million, and not more than 50 parts per million, denatonium benzoate as a bittering agent in order to render the coolant or antifreeze unpalatable.

(B) ALTERNATIVE AGENT.—If the inclusion of denatonium benzoate in engine coolant or antifreeze is required under subparagraph (A) and the Commission finds that—

(i) an alternative bittering additive is as effective as denatonium benzoate in rendering coolant or antifreeze unpalatable in terms of both its bittering capacity and its compatibility with motor vehicle engine coolant and antifreeze, and

(ii) there is no evidence that the use of the alternative bittering additive has an unreasonable adverse effect on the environment,

then the Commission may initiate a rulemaking to permit the use of the alternative bittering additive in lieu of denatonium benzoate.

(3) UNREASONABLE ADVERSE EFFECT DEFINED.—In this subsection, the term ‘unreasonable adverse effect on the environ-
ment’ means an unreasonable risk to human health or the environment, taking into account the economic, social, and environmental costs and benefits.

(4) FAILURE TO COMPLY.—Any engine coolant or antifreeze described in paragraph (2) that is not in compliance with that paragraph shall be—

(A) considered to be a banned hazardous substance; and

(B) subject to section 5.

(b) RECORDKEEPING.—

(1) IN GENERAL.—A manufacturer of an engine coolant or antifreeze described in subsection (a)(1) shall maintain a record of the trade name, scientific name, and any active ingredient of a bittering agent used under this section.

(2) AVAILABILITY TO PUBLIC.—Any record maintained under paragraph (1) shall be made available to the public on receipt by the manufacturer of a request from any person.

(c) LIMITATION OF LIABILITY.—

(1) IN GENERAL.—Subject to paragraph (2), a manufacturer, processor, distributor, recycler, or seller of an engine coolant or antifreeze described in subsection (a)(1) shall not be liable to a person for any personal injury, death, property damage, damage to the environment (including natural resources), or economic loss that results from the inclusion in the engine coolant or antifreeze of denatonium benzoate in accordance with subsection (a).

(2) EXCEPTION.—Paragraph (1) shall not apply in any case in which a cause of liability referred to in that paragraph is unrelated to the inclusion in an engine coolant or antifreeze of denatonium benzoate. Nothing in this subsection shall be construed to exempt any manufacturer or distributor of denatonium benzoate, or an alternative bittering additive the use of which is permitted under subsection (a)(2), from any liability related to denatonium benzoate or the alternative bittering additive.

(d) PREEMPTION.—No State or political subdivision of a State shall establish or continue to enforce, with respect to retail containers containing less than 55 gallons of engine coolant or antifreeze, any prohibition, limitation, standard, or other requirement relating to the inclusion of a bittering agent in engine coolant or antifreeze that is different from, or in addition to, the requirements of this section.

(e) EXEMPTION.—This section does not apply to—

(1) the sale of a motor vehicle that contains engine coolant or antifreeze; or

(2) a wholesale container of engine coolant or antifreeze that contains 55 gallons or more of engine coolant or antifreeze.