



CLEANER, RADIATOR FLUSH – NONACID

ESR-M14P7-A

1. SCOPE

This specification establishes the performance and product requirements for a nonacid radiator flush.

2. APPLICATION

This specification was released originally for material used in cleaning the internal surfaces of an automotive cooling system by means of circulation through the system at operating temperatures. This specification is not intended to limit the nonacid radiator flush to any specific material or material system, but rather defines the performance of the entire system.

3. REQUIREMENTS

- 3.1 The ingredient material used in the manufacture of this product shall be of high quality, suitable for the purpose intended, free from alkali and acid, and essentially neutral in pH.
- 3.2 Shall not produce obnoxious vapors in such concentrations to become an annoyance or health hazard to personnel when used in accordance with directions provided by the manufacturer.
- 3.3 No incompatibility when it is mixed at use concentration in 50% solutions of major brands of antifreezes.
- 3.4 Should be safe for use in all cooling systems, including aluminum, without any harmful effects.
- 3.5 Must be chemically stable under conditions encountered in engine operation and shall have no detrimental effect on the performance of the cooling system to which it is added.
- 3.6 Should efficiently remove grease, sludge, foreign particles, depleted oil inhibitors and loosely adherent rust from the internal surfaces of the cooling system.
- 3.7 Should not have any adverse effects upon allied parts of the cooling system, such as rubber hoses, gaskets and heater cores.
- 3.8 Should be of a water soluble liquid phase and should not have any suspended or solid matter.
- 3.9 Should not cling or adhere to any surface or portion of the cooling system, but should be capable of rapid removal when flushed with clear water.
- 3.10 Should have no detrimental effect upon exterior or engine paint, either automotive production or repair paints, when used as directed.

Date	Action	Revisions
2007 09 28	Revised	Inserted 3.0; Deleted 3.17 & 4; Revised 5.
1978 11 17		Metrected and Retyped CPH22-RD-815800-2 C.R. Wells
1969 05 26	Released	CPY22-947841-1





- 3.11** Must be capable of storage without any detrimental effect for an extended period of time. Supplier shall furnish all necessary information on types of material required for packaging and on the storage life of the material in each of the product packages supplied. For any particular size package or container for the product, the supplier shall furnish information on safe storage practice and recommendations as to maximum and minimum temperatures and direct sun load conditions at which the product may be stored without any adverse effect. If the package is considered unsafe for storage in an automotive vehicle, the package shall be labeled accordingly and the unsafe storage conditions specified.

3.12 CHEMICAL & PHYSICAL PROPERTIES

Specific chemical and physical properties are not specified herein, but an Engineering Quality Control Supplement will be issued to cover each approved material. The selected engineering approved source shall furnish appropriate chemical and physical properties along with the production tolerance limits that apply to the material(s) upon which approval was given. The agreed upon values and limits will be issued to Quality Control by the affected product engineering office. These values will then be used by Quality Control for ongoing quality verifications. The Quality Control Supplement is an integral requirement of this specification. If more than one source supplies material to this specification, a Quality Control Supplement will be issued for each specific approved material.

3.13 LABELING

- 3.13.1 Provisions of this specification are applicable when material is used according to labeling directions. Any precautions involved in the use of the material must be clearly stated on the product label.
- 3.13.2 The label(s) for the material(s) must comply with the Federal Hazardous Substances Act and all other provisions under the Consumer Product Safety Commission and all other applicable federal, state and local regulations. Supplier shall furnish the affected product engineering office with the label(s).
- 3.13.3 Supplier shall furnish certification that the composition of his product has been examined and that the label recommended is in compliance with the Federal Hazardous Substances Act and all other provisions under the Consumer Product Safety Commission. Completed Material Health and Safety Data Sheets and Hazardous Substances Data Sheets must be submitted by the supplier to the Ford Motor Company toxicologist.
- 3.13.4 If applicable, supplier shall furnish a copy of the laboratory report wherein the product was evaluated under the procedures required by the Federal Hazardous Substances Act.
- 3.13.5 Supplier must furnish detailed application instructions and specific usage information for container labels. This portion of the label information must be approved by the affected product engineering office.
- 3.13.6 If the label submitted by the supplier contains any advertising claims, suitable corroborative testing data must also be furnished. Such claims and data are encouraged.