



ENGINEERING STANDARDS

Material Specification

LIMITED USE
HN1992

Windscreen Washer Fluid

Do Not Use on New Programs; No Replacement

1. GENERAL

This specification covers the requirements for use of windscreen washer fluid used for cleaning windscreens. This fluid must be compatible with the exterior body paint finish, wiper paint finish and wiper blade rubber causing no detrimental defects.

2. TEST REQUIREMENTS

For approval, the material shall be subjected to the following tests:-

i) Compatibility With Exterior Body Paint Finish

On test panels with exterior body topcoat, place 3 drops each from a Pasteur pipette of the nominated fluid under test at the following concentrations:

- a) Supplier's recommended concentration.
- b) Twice the recommended concentration.
- c) As a concentrate.

Allow the panels to sit overnight at room temperature then examine the painted finish. There shall be no detrimental defects observed such as film softening, permanent discoloration etc.

NOTE: Allow the test panel 72 hours minimum ambient ageing after painting before testing to commence.

ii) Compatibility With Wiper Blade Rubber

In beakers containing the fluid under test at the following concentrations:

- a) Supplier's recommended concentration.
- b) Twice the recommended concentration.
- c) As a concentrate.

Fully immerse the wiper blade rubber material for 24 hours. There shall be no detrimental defects observed (immediately after immersion) on the wiper blade rubber material such as cracking or material breakdown, etc.

iii) Compatibility With Wiper Paint Finish

In beakers containing the fluid under test at the following concentrations:

- a) Supplier's recommended concentration.
- b) Twice the recommended concentration.
- c) As a concentrate.

Half immerse the selected painted wiper part for 24 hours.

Immediately after removal, no detrimental defects shall be observed such as film softening, blistering etc.

iv) Cleanability

Cleanability of the fluid under test must be equivalent to or better than the approved control fluid. Refer to the appropriate Materials Engineer for cleaning evaluation.

v) Fungal/Algae Growth

In beakers containing the fluid under test, diluted with deionized water, at the following concentrations:

- a) Supplier's recommended concentration.
- b) Twice the recommended concentration.
- c) Half the recommended concentration.

Allow solutions to condition undisturbed in a controlled environment of 23 ± 2 °C and 55 ± 5 % relative humidity for a period of 3 weeks. Upon visual examination on completion of test, no growth of foreign bodies such fungal/algae material should be evident.

3. APPROVAL SUBMISSION

Submission should include a test report detailing the requirements of Section 2 and a Materials Safety Data Sheet. After the time of approval, no change in formulation or process parameters shall be made without GM Holden Materials Engineering approval.

4. COLOUR

Colour of concentrate shall be such that when diluted to the specified strength the resulting solution can readily be seen through the reservoir.