



WATER QUALITY, INITIAL FILL - ENGINE COOLANT

WSS-M99P25-C

1. SCOPE

The water defined by this specification is intended to provide a guideline for water purity used with engine coolants.

2. APPLICATION

This specification was released originally for potable water which, when mixed with concentrated engine coolant, will not cause precipitation of corrosion inhibitors. This specification is for both initial fill and service use.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification is performance based and does not have approved sources.

3.2 CHLORIDE 40 ppm (mg/L) max
(EPA 9056 or equivalent)

3.3 SULFATE 100 ppm (mg/L) max
(EPA 9056 or equivalent)

3.4 TOTAL HARDNESS (as CaCO₃) 170 ppm (mg/L) max
(ASTM D 1126 or equivalent)

3.5 IRON 1 ppm (mg/L) max
(EPA 6010B or equivalent)

3.6 OTHER METALS (Excluding Na, Ca, Mg and K) 1 ppm (mg/L) max
(EPA 6010B or equivalent, max per metal)
Vehicle Operations (VO) plants Report only

3.7 SULFIDE 1 ppm (mg/L) max
(EPA 9030B or equivalent)

If sulfides are not measured analytically a fresh water sample shall have no detectable "rotten egg" odor.

3.8 TOTAL DISSOLVED SOLIDS 340 ppm (mg/L) max
(EPA 160.1 or equivalent)

Date	Action	Revisions	Rev. 3
2016 09 22	Revised	pH, See Summary of Revisions	A. Reaume, NA
2015 09 28	Editorial	See Summary of Revisions	A. Reaume, NA
2011 11 03	Activated		A. Reaume, FNA



3.9 pH (EPA 9040C or equivalent)	5.5 – 8.5
3.10 SPECIFIC CONDUCTIVITY (EPA 9050A or equivalent)	400 uS/cm, max

3.11 PARTICULATES

Particulate solids above 100 micrometers must be filtered using an inline water filter.

4. GENERAL INFORMATION

This information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.

4.1 RESPONSIBILITY

Each Vehicle Operations (VO) plant is responsible for achieving the requirements contained in this specification, with the exception of Section 3.6 Other Metals for which is report only, according to their own incoming water quality. Reference VOPQUN-236 *Surveillance and Control of Fluids*.

5. SUMMARY OF REVISIONS

2016 09 22
Revised 3.9 pH from 6.0 - 9.0 to 5.5 - 8.5. Removed WSS-M99P1111-A.

2015 09 28
Editorial – Added excluding to section 3.6

2014 05 16
Added 3.6 statement regarding VO plants
Added 4.1 statement regarding exception of section 3.6 Other Metals.

Document ID: WSS-M99P25-C