

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)		NUMBER: MPAPS BT-32
		Former Designation: CEMS BT-32
TITLE: Apparent Density of Solid Matter Test Adapted from ORD JR-OME PD #115 dated 21 November, 1956.		CURRENT REV No.: 1412
		DATE: Dec. 2014
WRITTEN/EDITED BY: Materials Engineering	APPROVED BY: Materials Engineering	SUPERSEDES: CEMS BT-32 - August 2009
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<i>This specification may involve hazardous materials, equipment, and procedures. This specification does not purport to address all of the safety issues associated with its use. The user is responsible to consult appropriate safety and health practices and to determine the applicability of regulatory limits prior to use.</i>		
Change Notice: Update to MPAPS format.		

1.0 SCOPE

This method covers a procedure for determining the apparent density of the solid matter in engine cooling system stopleak compounds.

2.0 APPARATUS

2.1 Apparatus required to perform MPAPS Test Method BT-26, Test for Solid Matter on Engine Cooling System Stopleak Compounds.

2.2 50 milliliter, glass-stoppered graduated cylinder

2.3 25 milliliter transfer pipette

2.4 10 milliliter transfer pipette

3.0 MATERIAL

Materials required to perform MPAPS Test Method BT-26, Test for Solid Matter on Engine Cooling System Stopleak Compounds.

4.0 PROCEDURE

4.1 Perform the test for solid matter, MPAPS BT-26, to obtain sufficient sample to perform duplicate determinations.

4.2 Place approximately 3 grams, weighed to the nearest 0.1 gram, of the dried solid matter obtained from the test for solid matter, MPAPS BT-26, into a 50 milliliter glass-stoppered graduated cylinder.

4.3 Add 25 milliliters of distilled water with a transfer pipette.

4.4 Stopper the tube and wet the solid thoroughly by shaking the cylinder at 5 minute intervals during a 15 minute period.

4.5 Add 10 milliliters of distilled water, with a transfer pipette, washing all adhering solids from the sides of the cylinder.

4.6 Stopper the tube and swirl the cylinder to thoroughly mix the solids and allow the mixture to stand for 15 minutes at a temperature of 75 ± 3 degrees Fahrenheit.

4.7 Record the volume of mixture.

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5.0 REPORT

Calculate the apparent density as follows:

$$\text{Apparent density of solid matter} = \frac{S}{R-35}$$

where

S = weight of solids used in grams

R = final volume of the mixture in milliliters

5.1 Report the average value of two determinations as “Apparent Density of Solid Matter”.

6.0 TECHNICAL INFORMATION

For further information related to the technical content of this specification, contact:	Suppliers may purchase controlled copies of this specification by contacting:
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