

NAVISTAR, INC.		
Material, Parts, and Process Specifications (MPAPS)		NUMBER: MPAPS B-6811
		<i>Former Designation: TMS-6811</i>
TITLE: Lubricant, Power Steering		CURRENT REV No.: 1608
		DATE: Aug. 2016
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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>		

1.0 APPLICATION

This specification covers a power steering fluid used in service systems (Fleetrite P/N FLTPS32, FLTPSF32, or Fleetrite P/N XX990625, where XX is a 2 place alpha prefix identifying the current supplier).

2.0 SCOPE

This specification covers the physical and chemical properties for a power steering fluid originally developed to meet Saginaw power steering specification requirements. It is suitable for use in other power steering systems, such as Ross and Sheppard.

2.1 Restricted Chemical Substances

Effective January 1, 2007, all product supplied to the requirements of this specification must comply with the requirements of the MPAPS B-50 specification.

3.0 REFERENCE DOCUMENTS

Unless otherwise specified the latest issue of all referenced standards shall apply. The following Specifications, Standards, and Regulations are referenced in this specification.

Quality System Standard <i>ISO 9001 or TS-16949</i>	ASTM D 92	ASTM D 445	ASTM D 2270
NAVISTAR Supplier Packing and Shipping Std. D-13	ASTM D 96	ASTM D 482	ASTM D 2272
CFR 29, Part 1910	ASTM D 97	ASTM D 611	ASTM D 2983
NAVISTAR MPAPS B-50	ASTM D130	ASTM D 665	ASTM D 3945
NAVISTAR MPAPS B-6810		ASTM D 892	ASTM D 4951

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4.0 REQUIREMENTS

4.1 Physical and Chemical Properties

4.1.1 Viscosity (ASTM D 445)

At 100° C (212° F) kinematic, cSt (mm²/s), 6.8 minimum

At 40° C (104° F) kinematic, cSt (mm²/s), 51.5 maximum

At -40° C (-40° F) **BROOKFIELD** (ASTM D 2983), cP, 35,000 maximum

4.1.2 Viscosity Index (ASTM D 97)

Shall be 160 – 185

4.1.3 Shear Stability (ASTM D 3945 Procedure A, 20 passes)

Kinematic viscosity @ 100° C (212° F), cSt; 5.74 minimum

4.1.4 Pour Point (ASTM D 97)

Shall be -42° C (-44° F) minimum

4.1.5 Flash Point (ASTM D 92)

Shall be 175° C (347° F) minimum

4.1.6 Foaming (ASTM D 892)

When tested at the following temperatures, foaming tendency and foam stability shall be as follows:

<u>Temperature</u>	<u>Foam Tendency</u>	<u>Foam Stability</u>
24° C (75° F)	100 ml, max	0
93° C (200° F)	100 ml, max	0
24° C (75° F) after testing at 93° C (200° F)	100 ml, max	0

4.1.7 Water and Sediments (ASTM D 96, Method A, without demulsifier or water)

Shall be 0.05% maximum.

4.1.8 Zinc Content (ASTM D 4951)

Shall be 40-60 ppm.

4.1.9 Phosphorus Content (ASTM D 4951)

Shall be 200 ppm, minimum

4.1.10 Aniline Point (ASTM D 611)

Shall be 90° - 102° C (200° - 216° F)

4.1.11 Ash (ASTM D 482, Procedure A)

Shall be 0.02% maximum.

4.1.12 Oxidation Stability (ASTM D 2272)

Shall be 200 minutes, minimum.

4.1.13 Corrosion Test (ASTM D 665, Procedures A and B, 24 hours)

Must pass both procedures A and B.

4.1.14 Copper Strip Corrosion (ASTM D 130, 1 hour, 150° C (302° F))

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