

STANDARD INFORMATION

Standard: UL 558

Standard ID: Industrial Trucks, Internal Combustion Engine-Powered [UL 558:2012
Ed.10+R:22Oct2021]

Previous Standard ID: Industrial Trucks, Internal Combustion Engine-Powered [UL 558:2012
Ed.10+R:01Jun2020]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **October 22, 2023**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes: New requirements for Diesel Exhaust Fluid (DEF) constructions used in industrial trucks. Specific details of new/revisted requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>

10	Info	Fuel Systems – Gasoline and Diesel
----	------	---

10.3	Info	Nonmetallic parts
------	------	--------------------------

A nonmetallic part in contact with non-ethanol blended gasoline, diesel fuel or diesel exhaust fluid (DEF) shall not show excessive volume change or loss of weight, when considered on the basis of its intended function, following immersion for 70 hours at a temperature of 23 ±2°C (73.4 ±3.6°F) in the test liquid specified in Table 10.1.

10.3.1 Exception No. 1: This requirement does not apply to fuel lines that conform with 10.2.3.
 Exception No. 2: This requirement does not apply to fuel system assemblies that conform with 10.2.4.
 Exception No. 3: This requirement does not apply to quick connect fittings that conform with 10.2.5.
 Exception No. 4: This requirement does not apply to gasketing and seals that have been investigated to the Standard for Gaskets and Seals, UL 157.

Test liquids for nonmetallic materials

	Liquid in contact with part	Test liquid
Table 10.1	Gasoline Diesel Oil <u>Urea</u>	A and C Reference Fuels (ASTM D471) IRM 903 Oil <u>DEF (Diesel Exhaust Fluid)¹</u>
	¹ DEF test fluid shall be in accordance with Supplement SA of the Outline of Investigation for Power Operated Dispensing Devices for Diesel Exhaust Fluid, UL 87C.	

10.6 ***New section added;***
Diesel Exhaust Fluid (DEF)

10.6.1 DEF system components shall be suitable for exposure to the DEF agent, operating conditions, as well as the operating environment of the intended application.

10.6.2 DEF components shall not leak or spray DEF to wet critical electrical, fuel and exhaust system components. Synthetic-rubber or nonmetallic components relied on to contain the DEF from such components shall comply with 10.3.1.



CLAUSE	VERDICT	COMMENT
	Info	MARKING
43	Info	Details
43.1		Each industrial truck shall be marked where it will be visible with the following: a) Name or trademark of the manufacturer. b) The type designation. c) Catalog designation, or equivalent identification. d) The grade in percentage – 1, 2, 3, ... 9 – for which the truck is designed to ascend if less than 10 percent. See 43.2; and <u>e) For DEF constructions, the marking shall be "DEF", "Diesel Exhaust Fluid", or the equivalent. This marking shall be prominently displayed to identify the DEF tank.</u>