



UL 142A

STANDARD FOR SAFETY

Special Purpose Aboveground Tank for Specific
Flammable or Combustible Liquids

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UL Standard for Safety for Special Purpose Aboveground Tank for Specific Flammable or Combustible Liquids, UL 142A

First Edition, Dated May 25, 2018

SUMMARY OF TOPICS

This revision to the first edition of the Standard for Safety for Special Purpose Aboveground Tanks for Specific Flammable or Combustible Liquids, UL 142A, is being issued to correct the publication date on the title page. This is an editorial correction, no requirements have changed..

The new requirements are substantially in accordance with Proposal(s) on this subject dated October 6, 2017 and March 16, 2018.

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MAY 25, 2018



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ANSI/UL 142a-2018

UL 142A

Standard for Special Purpose Aboveground Tanks for Specific Flammable or Combustible Liquids

First Edition

May 25, 2018

This ANSI/UL Standard for Safety consists of the First Edition.

The most recent designation of ANSI/UL 142A as an American National Standard (ANSI) occurred on May 24, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements cover special purpose steel aboveground tanks for specific fuels or liquids and/or use applications as indicated for each special purpose tank type, which are intended to address the specific designs, features, limitations, use factors and other unique characteristics of each type. These requirements are not covered by UL 142 for general purpose steel aboveground tanks for flammable and combustible liquids, as each special purpose tank deviates from them by construction, performance and/or markings for the intended use. The basic types of different special purpose tanks covered by this Standard are:

- a) Generator base tanks are designed for combined combustible fuel storage and structural support for diesel or turbine engine power generators, and are intended to be installed in accordance with the Installation and Use of Stationary Combustion Engines and Gas Turbines, NFPA 37, or Emergency and Standby Power Systems, NFPA 110. Generator base tanks are limited to Combustible Class II or III fuels, such as diesel, kerosene, turbine oils or heavy oils. Covered options may include fire resistance, damage resistance and/or tank support evaluations.
- b) Work top tanks are designed for combined combustible liquid storage and structural working surface, and are intended to be installed in accordance with NFPA 30, Code for Flammable and Combustible Liquids, NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, or NFPA 31, Installation of Oil-Burning Equipment. Work top tanks are limited to Combustible Class III liquids, such as heavy fuel oils, new/used lube oils, hydraulic/transmission oils, or similar working fluids. Covered options may include racks, shelves and/or tank support evaluations.
- c) Lube oil tanks are designed for storage of unused lubricating oils and similar combustible liquids, and are intended to be installed in accordance with NFPA 30, Code for Flammable and Combustible Liquids, NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, or NFPA 31, Installation of Oil-Burning Equipment. Lube oil tanks are limited to Combustible Class IIIB oils, such as motor crankcase oils, hydraulic/transmission oils, machine/cutting oils, or similar fluids. Covered options may include dispensing equipment and/or tank support evaluations.
- d) Used oil tanks are designed for storage of used lubricating oils and similar combustible liquids, and are intended to be installed in accordance with NFPA 30, Code for Flammable and Combustible Liquids, NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, or NFPA 31, Installation of Oil-Burning Equipment. Used oil tanks are limited to Combustible Class IIIB oils, such as motor crankcase oils, hydraulic/transmission oils, machine/cutting oils, or similar fluids. Covered options may include recycling equipment and/or tank support evaluations.
- e) Day tanks are designed for a small temporary or backup supply of fuel for engine-driven equipment, such as pumps or generators, and fuel-burning appliances such as furnaces or heaters, or other portable equipment typically used in farm, construction, mining, forestry, or similar applications, and are intended to be installed in accordance with NFPA 30, Code for Flammable and Combustible Liquids, NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, NFPA 31, Installation of Oil-Burning Equipment, NFPA 37, Installation and Use of Stationary Combustion Engines and Gas Turbines, or NFPA 110, Emergency and Standby

Power Systems. Day Tanks are limited to specific fuels as marked, such as Flammable Class I gasoline or Combustible Class II kerosene, diesel fuel or heating oil. Covered options may include dispensing equipment and/or tank support evaluations.

1.2 All special purpose tanks are atmospheric types, but may be of primary, secondary or diked containment designs; constructed in cylindrical or rectangular shapes; oriented horizontally or vertically, and have additional features or options, as described for each tank type.

1.3 All special purpose tanks are shop fabricated, but may be either completely assembled at the factory, or allow for limited field assembly. However, only the optional accessories which are described in this Standard and have been evaluated to applicable requirements are covered items for each tank type.

1.4 These requirements cover only the accessories, components and features specifically identified in this Standard. Any other accessories or components that are shipped with the tanks, attached to the tanks, or added to the tanks are not included in the scope of the tank evaluation. It is intended that the AHJ approve the use and/or installation of any such accessories or components independent of the evaluated tank.

1.5 For some special purpose tank types, it is expected that generators, engines, pumps or other equipment may be mounted on or connected to the tank. However, these devices are not covered or evaluated by the requirements of this Standard, other than the structural integrity of the tank at rated loads.

1.6 These requirements do not cover portable tanks intended for transporting flammable or combustible liquids (such as by truck, rail, ship or air), or mobile use applications (such as on vehicles or trailers). These types of products are covered by separate UN, DOT, or other specific end product standards.

1.7 These requirements do not cover special evaluations for resistance to hurricanes, tornadoes, earthquakes, floods, or other natural disasters; or fire and damage resistance, except for generator base tank options. However, assessment of any damage for continued use after such events are not included in the evaluation.

1.8 These requirements do not cover general purpose tanks, which are found in the Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, UL 142, or fuel oil tanks, which are found in the Standard for Steel Tanks for Oil Burner Fuel and Other Combustible Liquids, UL 80.

1.9 The common fuel, oil and other liquid terms referenced in this Standard are intended to be those which are commercially available, and which meet a recognized industry specification, such as ASTM or SAE.