



Designation: F1280 – 19

Standard Guide for Ecological Considerations for the Use of Surface Washing Agents: Impermeable Surfaces¹

This standard is issued under the fixed designation F1280; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide covers the use of surface washing agents to assist in the cleanup of oil spills. This guide is written with the goal of minimizing the environmental impacts of oil spills; this goal is the basis on which the recommendations are made. Aesthetic and socioeconomic factors are not considered although these and other factors are often important in spill response.

1.2 In making surface washing agent use decisions, appropriate government authorities should be consulted as required by law.

1.3 Spill responders have available several means to control or clean up spilled oil. In this guide, the use of chemical surface washing agents is considered.

1.4 This is a general guide only. Oil, as used in this guide, includes crude oils and refined petroleum products. Differences between individual surface washing agents or between different oil products are not considered.

1.5 This guide applies only to impermeable surfaces. This guide does not apply to shorelines.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This guide is under the jurisdiction of ASTM Committee F20 on Hazardous Substances and Oil Spill Response and is the direct responsibility of Subcommittee F20.13 on Treatment.

Current edition approved March 1, 2019. Published March 2019. Originally approved in 1990. Last previous edition approved in 2014 as F1280 – 14. DOI: 10.1520/F1280-19.

2. Referenced Documents

2.1 *ASTM Standards*:²

F1279 Guide for Ecological Considerations for the Restriction of the Use of Surface Washing Agents: Permeable Land Surfaces

F1872 Guide for Use of Chemical Shoreline Cleaning Agents: Environmental and Operational Considerations

3. Terminology

3.1 *Definitions*:

3.1.1 *permeability*—the capacity of the surface to conduct or transmit liquids such as water. An impermeable surface would not transmit water in a short time (minutes).

3.1.2 *surface*—the top or cover of the land at the site of interest.

3.1.3 *surface washing agents*—chemical substances, including surfactants, intended to loosen or mobilize oil from surfaces. Surface washing agents do not include dispersants. (See Guide F1872 for details on the use of surface washing agents.)

4. Significance and Use

4.1 This guide is meant to aid local and regional response teams who may use it during spill response planning and spill events.

4.2 This guide should be adapted to site-specific circumstances.

5. Environment Covered—Impermeable Surfaces

5.1 Impermeable surfaces include any soil, rock, hard pan, or other natural surface that does not readily permit the passage of water and oil.

5.2 Impermeable surfaces include man-made surfaces such as paved roads and parking lots. (See Guide F1279 for permeable surfaces.)

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.