



Designation: D6881/D6881M – 03 (Reapproved 2020)

Standard Classification for Standard Plastics Industry Bulk Box/Pallet Unit Size Classified By Bulk Density¹

This standard is issued under the fixed designation D6881/D6881M; 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.

INTRODUCTION

An ad-hoc survey in 2000 showed about 40 different box sizes in use by the plastic resin industry; the purpose for this classification is to quantify a box/pallet unit size acceptable for this industry within the limits of the scope.

1. Scope

1.1 This classification covers containers used to hold plastic resins with bulk density (Test Methods [D1895](#)) of 27 to 39 lb/ft³ (0.432 to 0.625 g/cm³).

1.2 This classification does not apply to any plastic resins with bulk density below 27 lb/ft³ (0.432 g/cm³) or above 39 lb/ft³ (0.625 g/cm³).

1.3 This classification does not apply to bulk boxes containing hazardous materials.

1.4 This classification does not address box/pallet unitization requirements.

1.5 This classification does not address requirements of plastic bag liners normally placed inside the corrugated bulk box before filling with plastic resin.

1.6 This classification does not address tamping, shaking, or other compression methods of the resin filled bulk box to condense entrained air and increase headspace in the bulk box.

1.7 This classification does not address blocking and bracing or other shipping requirements normally associated with bulk box unit deliveries.

1.8 This classification does not address filled bulk box/pallet unit stack height.

1.9 This classification does not address international shipping regulations of bulk box/pallet units.

1.10 This classification does not address pallet opening sizes for pallet trucks.

1.11 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.12 *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.*

1.13 *This classification offers an organized collection of information or a series of options and does not recommend a specific course of action. This document cannot replace education or experience and should be used in conjunction with professional judgement. Not all aspects of this classification may be applicable in all circumstances. This ASTM standard is not intended to represent or replace the standard of care by which the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's many unique aspects. The word "standard" in the title of this document means only that the document has been approved through the ASTM consensus process.*

1.14 *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 classification is under the jurisdiction of ASTM Committee [D10](#) on Packaging and is the direct responsibility of Subcommittee [D10.12](#) on Shipping Containers, Crates, Pallets, Skids and Related Structures.

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