

## C. Proposed Scope and Description of the Merchandise

### 1. Proposed Scope Language

The products covered by these petitions are all types of youth and adult mattresses. The term “mattress” denotes an assembly of materials that at a minimum includes a “core,” which provides the main support system of the mattress, and may consist of innersprings, foam, other resilient filling, or a combination of these materials. Mattresses may also contain (1) “upholstery,” the material between the core and the top panel of the ticking on a single-sided mattress, or between the core and the top and bottom panel of the ticking on a double-sided mattress; and/or (2) “ticking,” the outermost layer of fabric or other material (*e.g.*, vinyl) that encloses the core and any upholstery, also known as a cover.

The scope of these petitions is restricted to only “adult mattresses” and “youth mattresses.” “Adult mattresses” are frequently described as “twin,” “extra-long twin,” “full,” “queen,” “king,” or “California king” mattresses. “Youth mattresses” are typically described as “crib,” “toddler,” or “youth” mattresses. All adult and youth mattresses are included regardless of size or size description.

The scope encompasses all types of “innerspring mattresses,” “non-innerspring mattresses,” and “hybrid mattresses.” “Innerspring mattresses” contain innersprings, a series of metal springs joined together in sizes that correspond to the dimensions of mattresses. Mattresses that contain innersprings are referred to as “innerspring mattresses” or “hybrid mattresses.” “Hybrid mattresses” contain two or more support systems as the core, such as layers of both memory foam and innerspring units.

“Non-innerspring mattresses” are those that do not contain any innerspring units. They are generally produced from foams (*e.g.*, polyurethane, memory (viscoelastic), latex foam,

gel-infused viscoelastic (gel foam), thermobonded polyester, polyethylene) or other resilient filling.

Mattresses covered by the scope of these petitions may be imported independently, as part of furniture or furniture mechanisms (*e.g.*, convertible sofa bed mattresses, sofa bed mattresses imported with sofa bed mechanisms, corner group mattresses, day-bed mattresses, roll-away bed mattresses, high risers, trundle bed mattresses, crib mattresses), or as part of a set in combination with a “mattress foundation.” “Mattress foundations” are any base or support for a mattress. Mattress foundations are commonly referred to as “foundations,” “boxsprings,” “platforms,” and/or “bases.” Bases can be static, foldable, or adjustable. Only the mattress is covered by the scope if imported as part of furniture, with furniture mechanisms, or as part of a set, in combination with a mattress foundation.

Excluded from the scope of these petitions are “futon” mattresses. A “futon” is a bi-fold frame made of wood, metal, or plastic material, or any combination thereof, that functions as both seating furniture (such as a couch, love seat, or sofa) and a bed. A “futon mattress” is a tufted mattress, where the top covering is secured to the bottom with thread that goes completely through the mattress from the top through to the bottom, and it does not contain innersprings or foam. A futon mattress is both the bed and seating surface for the futon.

Also excluded from the scope are airbeds (including inflatable mattresses) and waterbeds, which consist of air- or liquid-filled bladders as the core or main support system of the mattress.

Further, also excluded from the scope of these petitions are any products covered by the existing antidumping duty orders on uncovered innerspring units from China or Vietnam. *See Uncovered Innerspring Units from the People’s Republic of China: Notice of Antidumping Duty*

*Order*, 74 Fed. Reg. 7661 (Feb. 19, 2009); *Uncovered Innerspring Units From the Socialist Republic of Vietnam*, 73 Fed. Reg. 75391 (Dec. 11, 2008).

Additionally, also excluded from the scope of these petitions are “mattress toppers.” A “mattress topper” is a removable bedding accessory that supplements a mattress by providing an additional layer that is placed on top of a mattress. Excluded mattress toppers have a height of four inches or less.

The products subject to these petitions are currently properly classifiable under HTSUS subheadings: 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087. Products subject to these petitions may also enter under HTSUS subheadings: 9404.21.0095, 9404.29.1095, 9404.29.9095, 9401.40.0000, and 9401.90.5081. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise subject to these petitions is dispositive.

## **2. Physical Characteristics and Uses**

These petitions cover certain mattresses, including innerspring and non-innerspring (including hybrid) mattresses. In the industry, the term “mattress” generally means a resilient material or combination of materials generally enclosed by ticking that is intended or promoted for sleeping upon by people. Mattresses generally consist of (1) a core, (2) upholstery material, and (3) ticking. The core provides the main support system of the mattress. The core may consist of innersprings, non-innersprings (*e.g.*, foam), an air or water bladder,<sup>9</sup> other resilient filling, or a combination of these materials. “Upholstery” refers to the material between the core

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<sup>9</sup> As noted above in Section II.C.1, airbeds and waterbeds are excluded from the scope of the petitions.

and the ticking. “Ticking” refers to the cover or the outermost layer of fabric or other material that encloses the core and any upholstery material.

A mattress may be used alone or in combination with other products, such as foundations commonly referred to as box springs, platforms, bases, and/or cribs. Mattresses may be sold independently, as part of furniture (examples are convertible sofa bed mattresses, corner group mattresses, day-bed mattresses, roll-away bed mattresses, high risers, and trundle bed mattresses), or as part of a set in combination with a mattress foundation.

“Adult mattresses” and “youth mattresses” are covered by the scope of these petitions, regardless of actual size. Youth mattresses are generally grouped together in size descriptions that include “crib,” “toddler,” or “youth.”

Mattresses are covered by the scope of these petitions even if imported without ticking, such as foam mattresses that are imported without ticking (*i.e.*, the outermost cover). Products covered by these petitions include mattresses packed and sold to end users in boxes, such as those marketed as “bed(s)-in-a-box,” “mattress(es)-in-a-box,” and/or “compressed mattress(es).”

### 3. Manufacturing Process

The manufacturing process for all types of mattresses is similar in that it consists of the assembly of components into finished mattresses that are ready for use by the ultimate purchaser. We provide representative illustrations of the mattress manufacturing process in **Exhibit I-5**.

Innerspring and hybrid mattresses are assembled from various components that differ based on the particular mattress design. Components generally consist of the core (innerspring units, foam (*e.g.*, polyurethane, memory (viscoelastic), latex, or gel), or other resilient fillings or a combination of the same) and the upholstery materials.

For innerspring mattresses, the innerspring unit may be produced internally or purchased from a supplier. Depending on the particular design, layers of fabric, upholstery, and/or foam are assembled around the core unit as operators “build-up” the mattress on an assembly table or production line. Separately, sewers run quilting machines that produce the ticking (also known as a “cover”), which may include a backing material.<sup>10</sup> In some instances, the cover is cut into panels for the top, bottom, and sides (also referred to as “borders”) on a panel cutting machine. A flange is sewn to the edge of the cover piece(s) and can be attached using a “hog ring” to the innerspring unit to prevent the cover and filling material from shifting once the border is attached and the mattress is sewn shut. A “tape,” which is a fabric that covers the edge where the top and bottom panels are joined to the border panel, is then sewn around the top and bottom edges of the mattress. In other instances, a simple “zippered” cover is used, which does not require a flange, hog ring, or tape. Innerspring (including hybrid) mattresses may be shipped compressed or uncompressed.

For foam mattresses, the manufacturing process begins with foam production. Foam mattress manufacturers may be vertically integrated (producing both the foam and foam mattress themselves) or they may purchase foam from unaffiliated foam suppliers. The precursor chemicals are combined based on the specific formulation for the type of foam. For example, polyurethane foam is generally comprised of a polyol (complex alcohol) and isocyanate that are kept in separate storage tanks. These materials are mixed with catalysts and a surfactant and heated, which then begins a reaction to form a polyurethane polymer that is combined with carbon dioxide and sprayed or “poured” onto a plastic covered conveyor belt. The reaction

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<sup>10</sup> The borders, or vertical sides of the mattress, may be constructed on separate border machines that combine ticking, a backing material, foam and/or other upholstery.

generates carbon dioxide gas that causes the material to expand as it moves down the conveyor belt. Once the foam has fully expanded and partially cured, it is cut into large blocks which are allowed to fully cure for up to 72 hours. After product properties are tested and confirmed to meet specifications, the cured blocks are then cut into trimmed rectangular sheets (or plates) of various thicknesses that correspond to finished mattress sizes. The foam mattress may consist of a single slab of foam or multiple layers (plates) that have been bound together. The foam mattress may then be encased in a fabric “sock” and inserted into the cover (*i.e.*, the ticking). The final step is packaging. As with innerspring (including hybrid) mattresses, foam mattresses may be shipped compressed or uncompressed.

The manufacturing process for youth mattresses is similar to adult mattresses but can vary by not using flange material to attach the panels to the innerspring. The covers can be pre-sewn with only one open end, and the core and upholstery materials inserted into the cover with the aid of a stuffing machine. The cover opening is then sewn shut (instead of stitching around the entire perimeter of the mattress). Youth mattresses can use vinyl material in addition to cloth materials as the ticking.

#### **4. Tariff Classification**

As indicated above, the products subject to these petitions are currently properly classifiable under HTSUS subheadings 9404.21.0010, 9404.21.0013, 9404.29.1005, 9404.29.1013, 9404.29.9085, and 9404.29.9087.<sup>11</sup>

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<sup>11</sup> See Exhibit I-6.