

3 DESCRIPTIVE INFORMATION FOR CAMEL SNUS SMOKELESS TOBACCO PRODUCTS

3.1 Product Description

3.1.1 Brand and sub-brand identification of proposed modified risk products

The six tobacco products that are the subject of this MRTP Application are all portioned pouched smokeless tobacco products within the snus sub-category. The full identification of these tobacco products is provided in [Table 3.1-1](#).

Table 3.1-1: Identification of Proposed MRTP Products

	Brand	Sub-brand ¹	Product Weight (per portion)	Pouches (per package)	Total Package Weight
1.	Camel	Camel Snus Frost	600 mg	15	9000 mg
2.	Camel	Camel Snus Mint	600 mg	15	9000 mg
3.	Camel	Camel Snus Mellow	600 mg	15	9000 mg
4.	Camel	Camel Snus Frost Large	1000 mg	15	15000 mg
5.	Camel	Camel Snus Winterchill	1000 mg	15	15000 mg
6.	Camel	Camel Snus Robust	1000 mg	15	15000 mg

R.J. Reynolds Tobacco Company (“RJRT”) is the owner and registrant for all six products; it is also responsible for manufacturing specification development and procurement of materials that are used in the manufacturing of the products. American Snuff Company, LLC, under contract with RJRT, manufactures the six products.

3.1.2 Description of product form

Snus is an oral smokeless tobacco that has been used in Sweden since the early 1800s and is sold both as loose tobacco and as tobacco portioned in fleece pouches. Snus has historically used finely ground tobaccos that undergo a two-step process: (1) a heat treatment process in the presence of water and sodium chloride; and (2) a cooking process which incorporates the addition of a pH-modifying solution. The primary differences between snus and the various types of moist snuff tobacco products traditionally sold in the United States are (1) the tobacco types used and (2) manufacturing processes used to produce the final product. Specifically, snus manufacturing uses tobaccos processed via heat treatment, rather than via fermentation. Both of these tobacco processing methods, heat treatment and fermentation, are used in order to improve the taste and/or to minimize the potential for microbial activity, but it is generally

¹ RJRT refers to these subbrands as “brand styles,” “varieties,” “variants,” or “flavor variants” in the text of this Application.

accepted that heat treatment (along with selection of tobaccos) has the greater impact on lowering quantities of harmful or potentially harmful constituents (“HPHCs”) when compared to other forms of smokeless tobacco which use the fermentation process.

(b) (4)

(b) (4) All six Camel Snus products are portioned, pouched products and use a base blend of tobaccos. (b) (4)

(b) (4)

(b) (4) . (b) (4) are then pouched in a porous fleece material and packaged in metal tins to make the finished product.

3.1.3 Description of product dimensions and overall construction

3.1.3.1 Construction materials

(b) (4)

(b) (4) a final pouched snus product is referenced as an (b) (4)
(b) (4) The two primary components (b) (4) are (1) a non-tobacco porous wrapping material (fleece), the purpose of which is to portion the product; and (2) a heat treated/flavored tobacco blend referred to as (b) (4) All Camel Snus products are packaged in metal tins with a fifteen (15) pouch count per package.

3.1.3.1.1 Fleece

Fleece is the porous material for snus that portions the (b) (4) (b) (4)

3.1.3.1.2 (b) (4)

(b) (4)

(b) (4) . A brief description of each (b) (4) sub-component is provided below, with more detailed discussion in subsequent sections.

- Tobacco – (b) (4)
(b) (4)

- (b) (4)
- (b) (4)
- (b) (4)
- (b) (4)
- (b) (4)

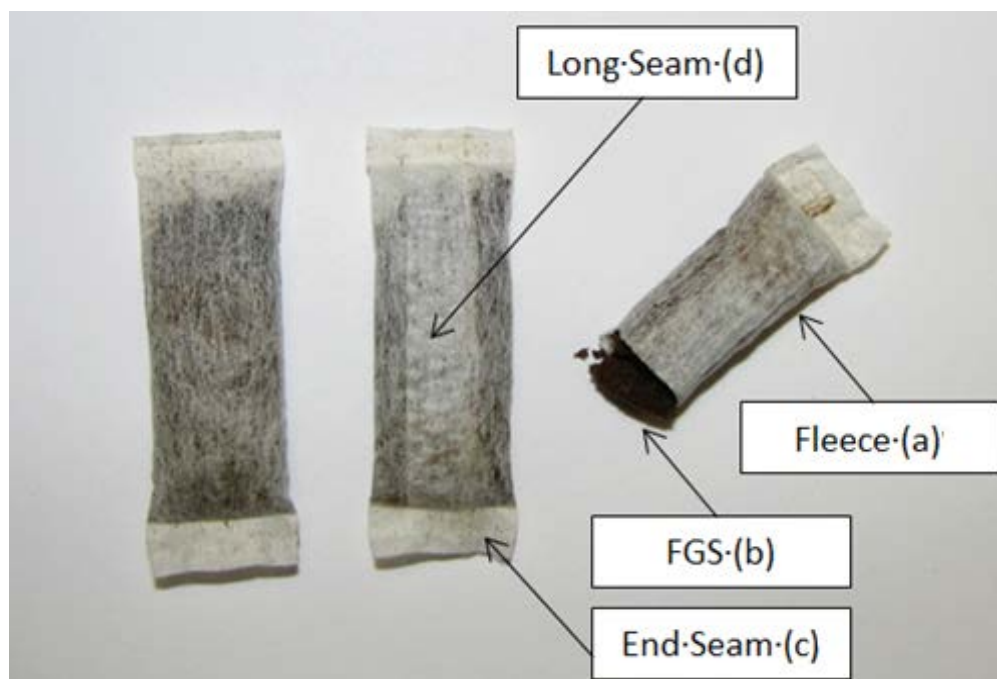
3.1.3.2 Construction overview

Figure 3.1-1 presents a photograph of a 600 mg Camel Snus IFP that displays both sides of the snus pouch and identifies the seams used in its construction. The right-most pouch in Figure 3.1-1 has been dissected for viewing, (b) (4)

(a). (b) (4)

(b) (4)

Figure 3.1-1: Photograph of a 600 mg Camel Snus Individual Finished Pouch (IFP)



3.1.3.3 Final product dimensions

Camel Snus variants have a target finished weight of (b) (4)

(b) (4)

These target weights include (b) (4)

(b) (4)

(b) (4)

Table 3.1-2 provides a summary of target specification weights, target specification lengths, and approximate widths for the referenced Camel Snus products. All values are expressed to three significant digits.

Table 3.1-2: Target Specifications for Camel Snus Products (including approximate pouch width dimensions)

Variant	Pouch (IFP) (mg)	Fleece (mg)	Tobacco (b) (4) (mg)	Pouch length (mm)	Pouch width (mm)
Camel Snus Frost	600	(b) (4)	(b) (4)	(b) (4)	(b) (4)
Camel Snus Mint	600	(b) (4)	(b) (4)	(b) (4)	(b) (4)
Camel Snus Mellow	600	(b) (4)	(b) (4)	(b) (4)	(b) (4)
Camel Snus Frost Large	1000	(b) (4)	(b) (4)	(b) (4)	(b) (4)
Camel Snus Winterchill	1000	(b) (4)	(b) (4)	(b) (4)	(b) (4)
Camel Snus Robust	1000	(b) (4)	(b) (4)	(b) (4)	(b) (4)

3.1.3.4 Finished product packaging

All six variants of Camel Snus are packaged in a two-piece metal container described to adult tobacco consumers as a “Fresh Seal Tin.” Each tin contains fifteen (15) Camel Snus pouches. The container is fabricated out of tin plated steel plate, commonly used in various food containers (e.g., premium cookies, crackers, candy and chewing gum). (b) (4)

The exterior tin plate is printed with variant-specific Camel Snus graphics, the colors of which are individualized to each flavor variant (see Figure 3.1-2). Warning label statements, as mandated by Section 3(d) of the Comprehensive Smokeless Tobacco Health Education Act of 1986 (“CSTHEA”), as amended by Section 204 of the TCA (TCA Section 204(a)(1)), comprise thirty percent (30%) of the total area of exterior printed area for both the base and the lid.

Figure 3.1-2: Front Exterior View of Camel Snus Brand Family Packaging



3.1.4 Presence and description of heating source

As a smokeless tobacco product, Camel Snus does not contain a heating source and is not intended to be burned or heated when used.

3.1.5 Description of product design features

Table 3.1-3 summarizes design features. These values are expressed to three significant figures. These specifications are classified as:

- (b) (4)

3.1.5.1 Final pouch weight (portioned)

(b) (4)

A large rectangular area of the document is redacted with a solid grey fill.

3.1.5.2 Final product pH

(b) (4)

A large rectangular area of the document is redacted with a solid black fill.

3.1.5.3 Final product moisture

(b) (4)

A large rectangular area of the document is redacted with a solid black fill.

3.1.5.4 Fleece weight (portioned)

(b) (4)

A large rectangular area of the document is redacted with a solid black fill.

3.1.5.5 Tobacco weight (portioned)

(b) (4)

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3.1.6 Other information relevant to describing the tobacco product, such as whether the tobacco product requires special handling or storage

Camel Snus products are packaged in metal tins which include a barrier seal in the lid. This seal mitigates loss of product moisture and is intended to maintain the freshness and quality of the product. Camel Snus products do not require special handling or storage.

3.2 Formulation of Camel Snus Smokeless Tobacco Products

This section summarizes detailed information on the formulation and manufacturing of Camel Snus.

3.2.1 List of uniquely identified components, ingredients, and additives by quantity and applicable specifications and a description of the intended function for each

(b) (4)

In this section, we provide information related to the tobaccos, ingredients added to tobacco, and structural materials that are used in each product.

3.2.1.1 Specification management

Manufacturing specifications for RJRT tobacco products, including Camel Snus, are managed using the (b) (4).² This system is maintained by RJRT's Research and Development department. (b) (4)

(b) (4)

(b) (4)

(b) (4)

(b) (4)

Table 3.2-1: (b) (4) Part Numbers for Camel Snus Individual Finished Pouches (IFP)

Product	Merz Pouches	GD Pouches
Camel Snus Frost (600 mg)	(b) (4)	(b) (4)
Camel Snus Mint (600 mg)	(b) (4)	(b) (4)
Camel Snus Mellow (600 mg)	(b) (4)	(b) (4)
Camel Snus Frost Large (1000 mg)	(b) (4)	(b) (4)
Camel Snus Winterchill (1000 mg)	(b) (4)	(b) (4)
Camel Snus Robust (1000 mg)	(b) (4)	(b) (4)

N/A = these variants can only be manufactured on GD pouching machines, and thus are associated with only one (b) (4) number for the final (b) (4)

3.2.1.2 Categories of components

Camel Snus is composed of three categories of product components: tobacco, ingredients added to tobacco, and structural materials.

- Tobaccos

Tobaccos are generally defined as any tobacco plant material, in whole or in part, that comprise the tobacco blend portion of a smokeless tobacco product which is intended for oral or nasal consumption. (b) (4)

(b) (4)

- Ingredients Added to Tobacco

Ingredients potentially added to tobacco include materials such as (b) (4),

(b) (4)

- Structural Materials

(b) (4)

(b) (4)

(b) (4)

3.2.1.3 Overview of product composition

The ingredients that comprise (b) (4) of each Camel Snus variant and an overview of how the listed components are combined during the manufacturing process is summarized in [Table 3.2-2](#), [Table 3.2-3](#), [Table 3.2-4](#), [Table 3.2-5](#), [Table 3.2-6](#) and [Table 3.2-7](#). These values are expressed to three significant figures.

This section contains an overview of all ingredients used in the manufacture of Camel Snus products. Individual component categories are addressed in subsequent sections.

(b) (4)

(b) (4)

. This

³ RAIS's Product Integrity's evaluation is grounded in regulatory guidance and precedent. It entails product and process review by board-certified toxicologists and assignment of a "level of concern" ("LOC") ranging from I (low) to V (high). Any LOCs greater than LOC I require chemical and/or biological testing in an escalating tiered testing strategy. This product stewardship program is comparable to the tiered testing strategies used for over 20 years by U.S. regulatory agencies. All tobacco blends and processes, ingredients added to tobacco, and structural materials used by RJRT in Camel Snus have been evaluated and approved for use by RAIS Product Integrity.

⁴ The Agency's Guidance for Listing of Ingredients in Tobacco Products provides that the quantity of a given ingredient may be calculated "based on the added amounts and adjusting for known or intended losses" during manufacturing ([FDA 2009](#)).

submission presents ingredient information corresponding to individual components and thus, an ingredient may be listed multiple times if it appears in multiple components.

3.2.1.3.1 Complete list of ingredients per product

Table 3.2-2: Camel Snus Frost (600mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
Structural Materials	(b) (4) - (b) (4)						

Table 3.2-3: Camel Snus Mint (600mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
Structural Material	(b) (4) - (b) (4)						

Table 3.2-4: Camel Snus Mellow (600mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b)						
	(b) (4)						
	(b)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
Structural Material	(b) (4)						

Table 3.2-5: Camel Snus Frost Large (1000mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
Structural Material	(b) (4)						
	(b) (4)						

Table 3.2-6: Camel Snus Winterchill (1000mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
Structural Material	(b) (4)						

Table 3.2-7: Camel Snus Robust (1000mg) Complete Ingredient List

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Tobaccos	(b) (4)	(b) (4)					
	(b) (4)						
	(b) (4)						
	(b) (4)						
Ingredients Added to Tobacco	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						
	(b) (4)						

	Ingredient Name	Type of Ingredient	CAS #	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
Structural Material	(b) (4)	(b) (4)					

3.2.1.3.2 Assembly of Subcomponents

Table 3.2-8: Overview of Major Components of Camel Snus Individual Finished Pouches and Corresponding PDM Parts Numbers

(b) (4)



3.2.1.4 Tobacco blend components

(b) (4)



Since tobacco is an agricultural product, it is subject to wide variations in properties within a given type.⁵

Given its agricultural nature, tobacco leaf is both heterogeneous and temporally variable to some degree. RJRT attempts to minimize the effects of naturally occurring variability and provide consistent-tasting blends for our products. (b) (4)

Tobacco blend ingredients are summarized in [Table 3.2-9](#), [Table 3.2-10](#), [Table 3.2-11](#), [Table 3.2-12](#), [Table 3.2-13](#) and [Table 3.2-14](#). These values are expressed to three significant figures.

Table 3.2-9: Camel Snus Frost (600mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

Table 3.2-10: Camel Snus Mint (600mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

⁵ These variations are a result of growing season conditions, agricultural practices, fertilization, soil type, leaf stalk position on the tobacco plant, etc. (b) (4)

Table 3.2-11: Camel Snus Mellow (600mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

Table 3.2-12: Camel Snus Frost Large (1000mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

Table 3.2-13: Camel Snus Winterchill (1000mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

Table 3.2-14: Camel Snus Robust (1000mg) Tobacco Blend Ingredients

	Ingredient Name	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)					

3.2.1.5 Ingredients added to tobacco

(b) (4)

The major non-tobacco ingredients used in manufacturing Camel Snus products are as follows:

- (b) (4)
- (b) (4)
- (b) (4)
- (b) (4)

(b) (4)

(b) (4) [REDACTED]

- (b) (4) [REDACTED]

[Table 3.2-15](#), [Table 3.2-16](#), [Table 3.2-17](#), [Table 3.2-18](#), [Table 3.2-19](#), and [Table 3.2-20](#) show how the various components of Camel Snus are put together during the manufacturing process. These values are expressed to three significant digits.

Table 3.2-15: Camel Snus Frost (600mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
(b) (4)												

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)



Table 3.2-16: Camel Snus Mint (600mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4) - (b)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)

Table 3.2-17: Camel Snus Mellow (600mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)



	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)



Table 3.2-18: Camel Snus Frost Large (1000mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
(b) (4)												

Table 3.2-19: Camel Snus Winterchill (1000mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4) e	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)

Table 3.2-20: Camel Snus Robust (1000mg) Ingredients Added to Tobacco

	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
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(b) (4)



	Ingredient Name	Type of Ingredient	Unique Scientific Name or Code	Mfr. Name	(b) (4)	Ingredient Function	If "Other..." Function, Specify	Part(s) Ingredient is added to	(b) (4)	(b) (4)	(b) (4)	Unit
(b) (4)												

3.2.1.5.1 Ingredient suppliers

(b) (4)



Table 3.2-21: Suppliers of Ingredients Added to Tobacco in Camel Snus products

	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
(b) (4)						

	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
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(b) (4)



	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
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(b) (4)



	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
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(b) (4)



	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
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(b) (4)



	Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Purity	Representative Manufacturer Information
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(b) (4)



3.2.1.5.2 Ingredient technical specifications and properties

Internationally recognized standards for the purity and identity of food ingredients, such as those compiled by the Food Chemicals Codex (FCC) and U.S. Pharmacopeial Convention (USP), specify a number of acceptance criteria for any given parameter, many of which are included on documentation such as CoAs or specification sheets. RJRT internal accept/reject criteria for the additives used in Camel Snus products include the chemical and physical properties listed below.

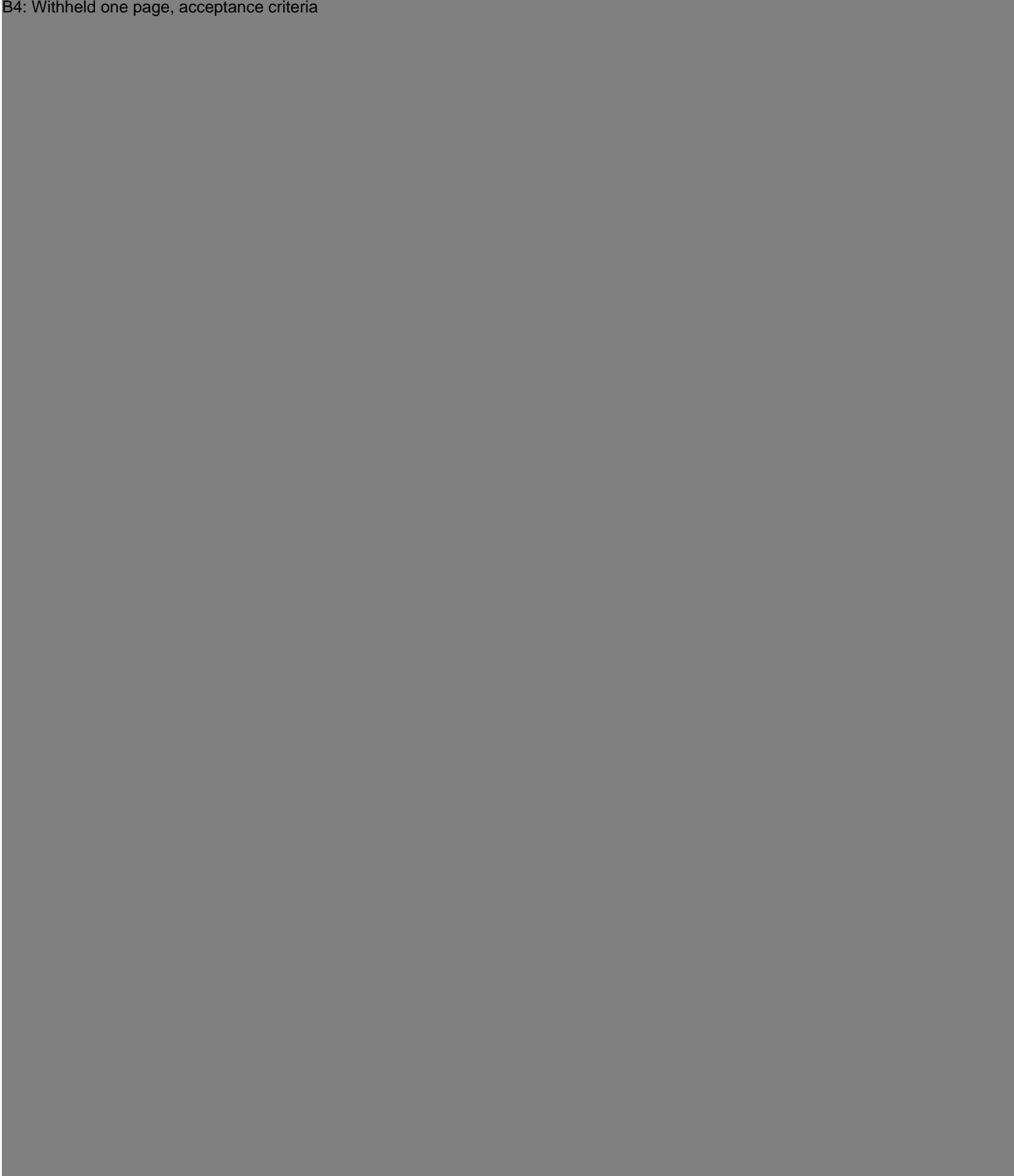
(b) (4) [REDACTED]

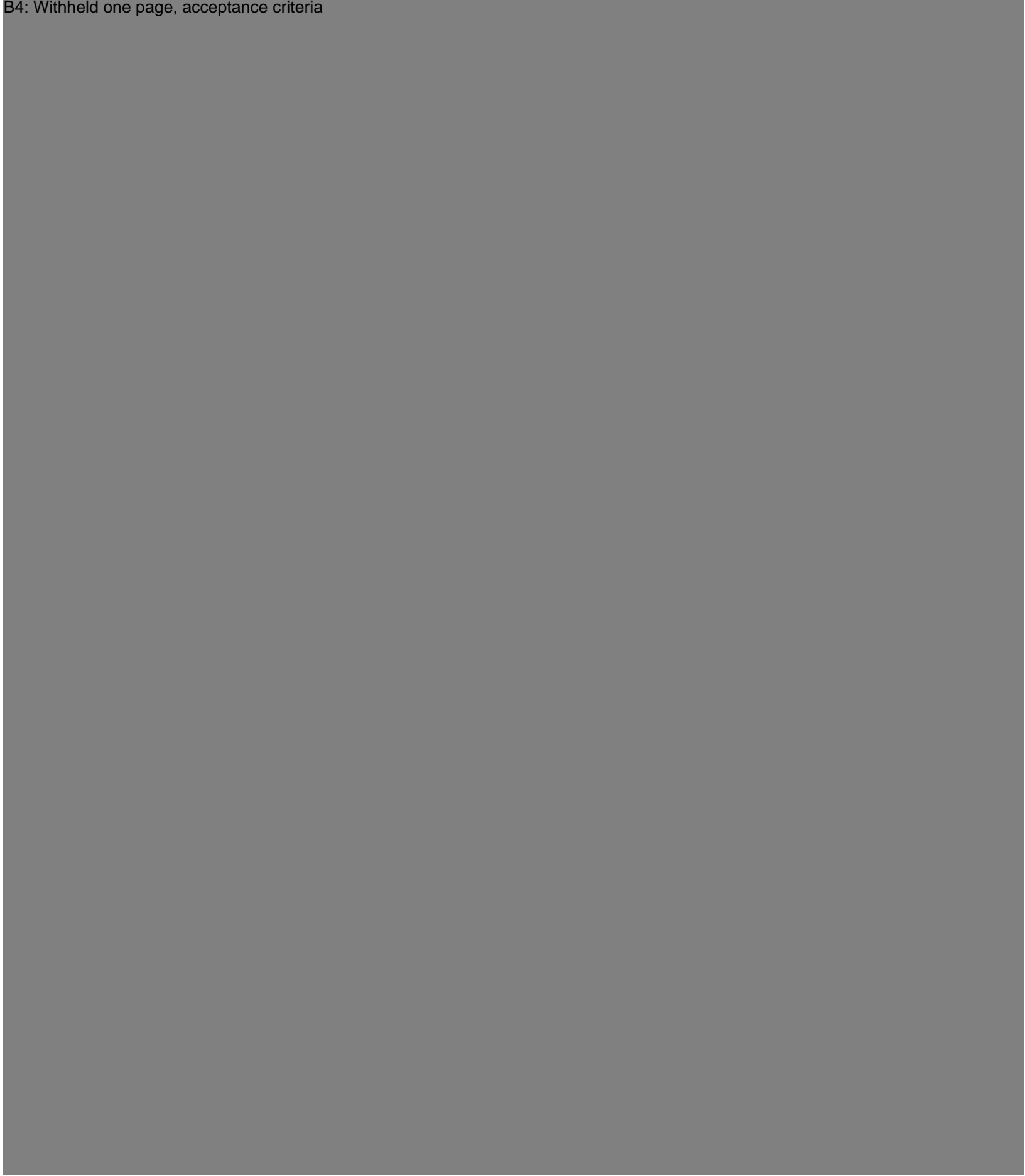
(b) (4) [REDACTED]

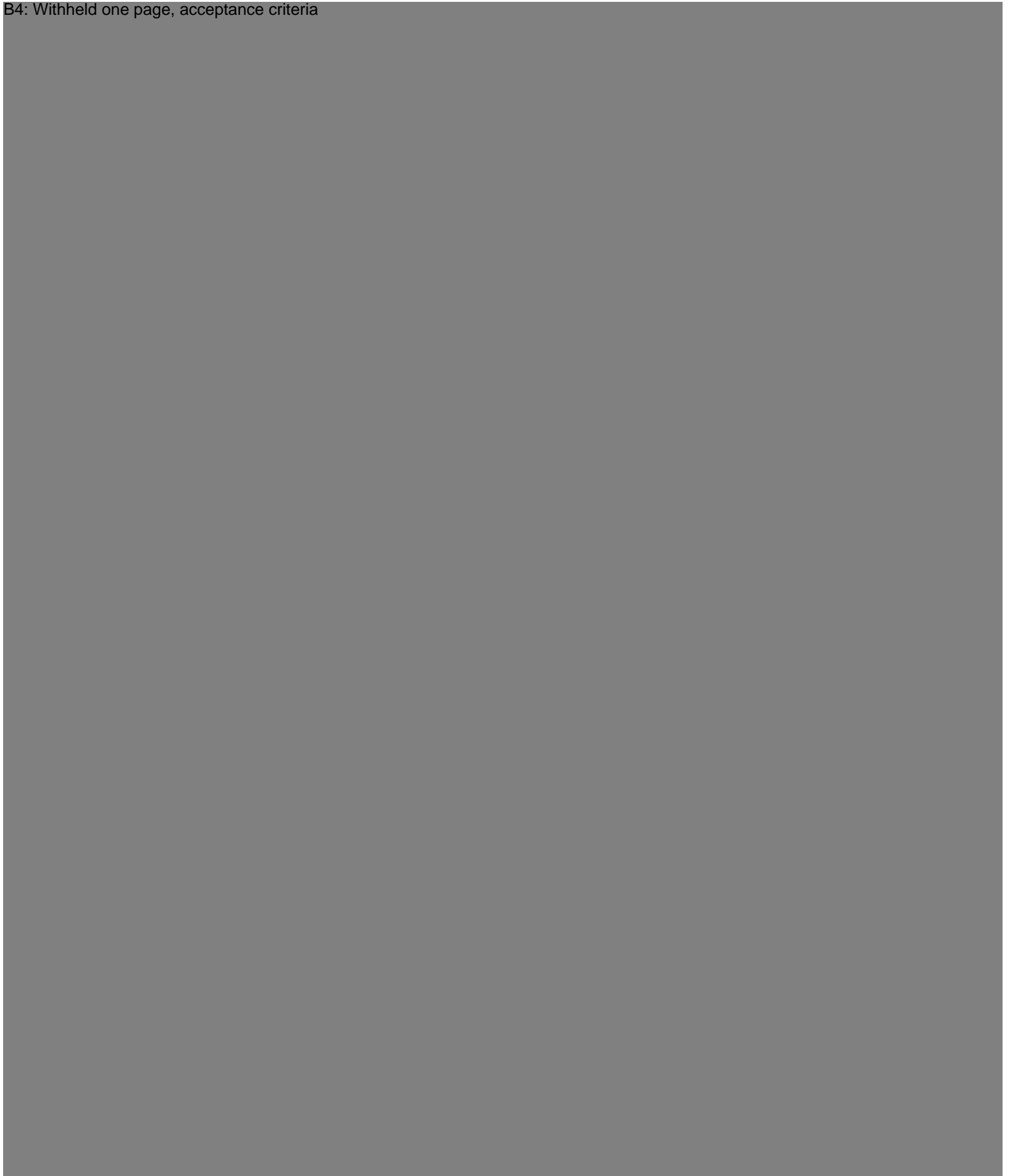


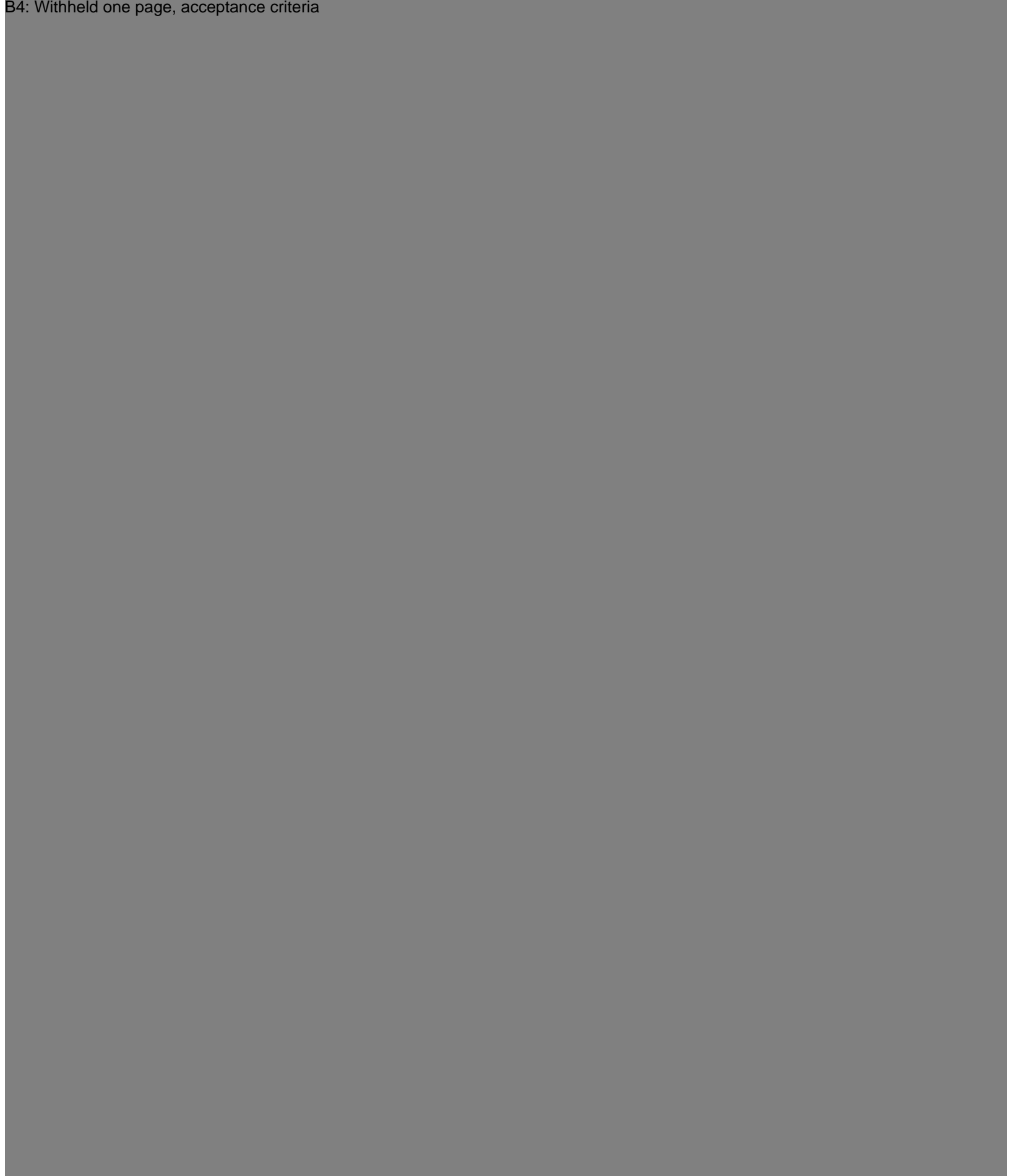


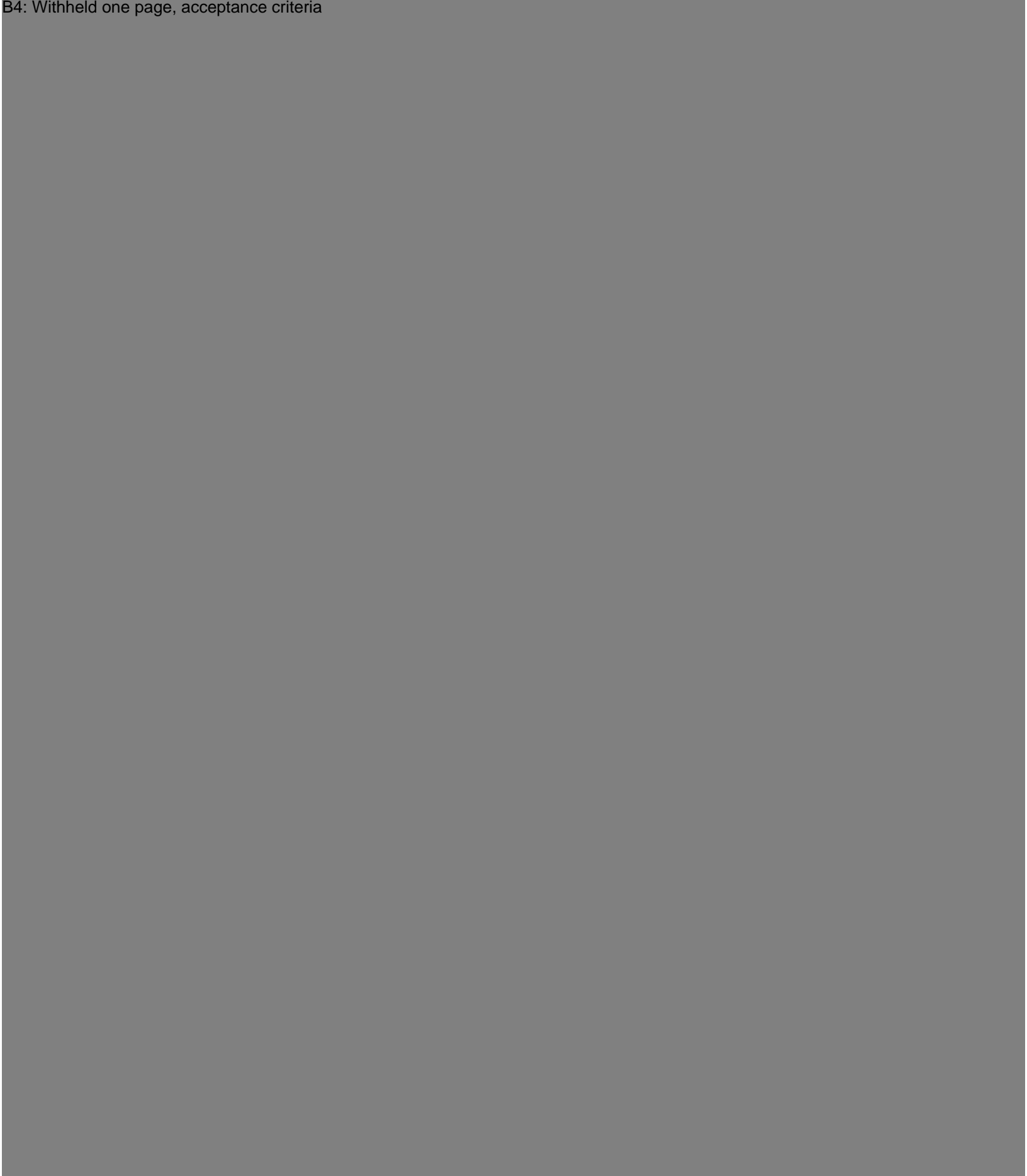












3.2.1.5.3 Complex subformulations

Camel Snus variants contain proprietary, complex flavor materials as described in [Table 3.2-22](#). Proprietary flavor mixtures, listed as “complex purchased ingredients” in the above tables, are considered trade secret by RJRT and its suppliers.

Table 3.2-22: Proprietary Flavor Mixtures

Ingredient Name	Internal Item ID	Supplier / Manufacturer	(b) (4)	Employed in
(b) (4)				

3.2.1.6 Structural material components

Fleece is the pouch material used to portion Camel Snus products. (b) (4) -

(b) (4) . (b) (4)

(b) (4)

Structural material ingredients are summarized in [Table 3.2-23](#), [Table 3.2-24](#), [Table 3.2-25](#), [Table 3.2-26](#), [Table 3.2-27](#), and [Table 3.2-28](#). These values are expressed to three significant figures.

Table 3.2-23: Camel Snus Frost (600mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

Table 3.2-24: Camel Snus Mint (600mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

Table 3.2-25: Camel Snus Mellow (600mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

Table 3.2-26: Camel Snus Frost Large (1000mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

Table 3.2-27: Camel Snus Winterchill (1000mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

Table 3.2-28: Camel Snus Robust (1000mg) Structural Materials

Ingredient Name	Type of Ingredient	Manufacturer's Name	(b) (4) (b) (4)	Ingredient Function	(b) (4)	(b) (4)	(b) (4)	Unit of Measure
(b) (4)								

3.2.1.6.1 Fleece suppliers

Table 3.2-29: Suppliers of Structural Material Ingredients in Camel Snus products


Ingredient Name	CAS Number	Internal Item ID	Supplier(s) (internal supplier code)	Product Grade (Compendium)	Representative Manufacturer Information
-----------------	------------	------------------	---	-------------------------------	---

(b) (4)




3.2.1.6.2 Fleece technical specifications and properties


Fleece is the porous wrap for snus pouches. It is composed of a nonwoven fiber held together via a water-based binder. (b) (4)



1. (b) (4)



Supplier: (b) (4)



Chemical / Physical Properties

(b) (4)



Dimensions / Weights

(b) (4)



Chemical / Physical Properties

(b) (4)



Dimensions / Weights

(b) (4)



3. (b) (4)

(b) (4)

Chemical / Physical Properties

(b) (4)

Dimensions / Weights

(b) (4)

3.2.1.7 Packaging components

All six flavor variants of Camel Snus are packaged in a two-piece metal container described to consumers as a “Fresh Seal Tin.” Each tin contains fifteen snus pouches. The container is fabricated out of tin plated steel, commonly utilized in the fabrication of various food containers (*e.g.*, premium cookies, crackers, candy and chewing gum). (b) (4)

The exterior tin is printed with specific Camel Snus graphics, the colors of which are individualized to each flavor variety (see [Figure 3.1-2](#) in [Section 3.1.3.4](#)). Warning label

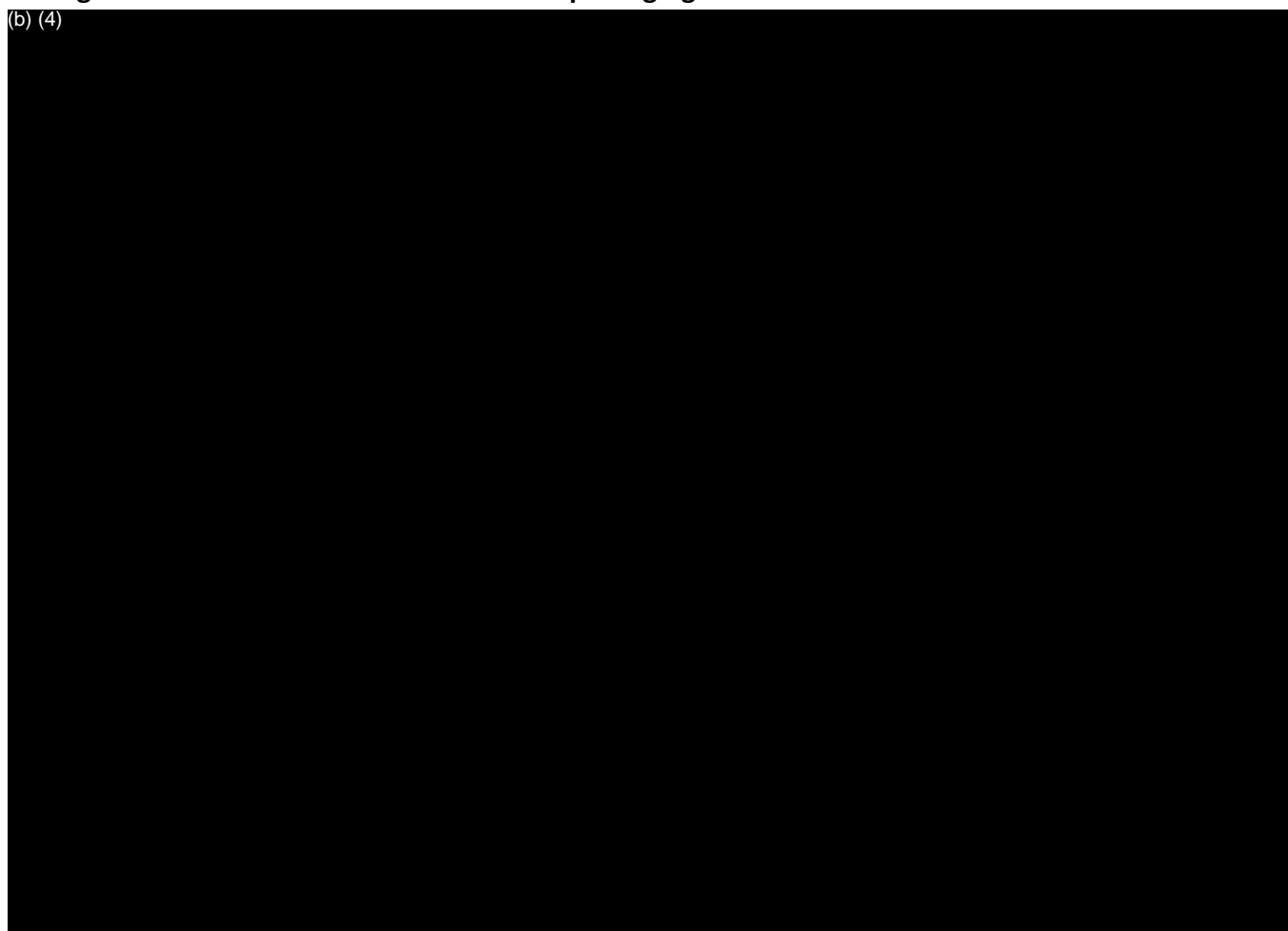
statements comprise thirty percent of the total area of exterior printed area for both the base and the lid in accordance with current FDA requirements.

A listing of the packaging components is presented in [Table 3.2-30](#). An illustration of the packaging configuration is presented in [Figure 3.2-1](#).

Table 3.2-30: Packaging Materials for Camel Snus products

Packaging Component	Material
Metal Lid	(b) (4)
Metal Base	
(b) (4)	
(b) (4)	
(b) (4)	

Figure 3.2-1: Illustration of Camel Snus packaging



(b) (4)

A large rectangular area of the document is redacted with a solid grey fill.

The specified dimensions for the lid and tin are illustrated in [Figure 3.2-2](#) and provided in the following files:

(b) (4)

A horizontal rectangular area of the document is redacted with a solid grey fill.

(b) (4)

A horizontal rectangular area of the document is redacted with a solid grey fill.

Figure 3.2-2: Camel Snus Lid and Base Dimensions

(b) (4)



3.2.2 Description of tobacco blending

3.2.2.1 Tobacco procurement

The RJRT Leaf group is responsible for the procurement of all tobaccos used in the production of Camel Snus products. (b) (4)

(b) (4)

(b) (4)

(b) (4)
(b) (4)

3.2.2.2 Tobacco material suppliers

(b) (4)
(b) (4)

(b) (4)

All tobacco material and related service suppliers are qualified and approved based on their ability to consistently meet company specified requirements. Company specified requirements for the supplier may include (b) (4)

(b) (4)

Suppliers for RJRT are required to abide by all applicable laws, codes and regulations, including, but not limited to, any local, provincial, or national laws regarding wages and benefits, workers' compensation, working hours, equal opportunity, worker and product safety, unfair business practices; anti-discrimination; and humane treatment of workers (see [RJRT-GUIDE-000109 \[004\] 2016 Leaf Procedures Booklet](#)). Compliance with all applicable environmental laws, regulations, and standards is required. Suppliers are required to comply with any additional reasonable requirements specific to the product or service being supplied as identified in the specification/guideline.

(b) (4)

(b) (4)



Detailed information on RJRT procedures and policies for purchases of tobacco leaf is located in [RJRT-GUIDE-000109 \[004\] 2016 Leaf Procedures Booklet](#).

3.2.2.3 Tobacco curing, processing, and blending

(b) (4)



3.2.2.4 Tobacco sampling

(b) (4)



3.2.2.5 Tobacco receiving and storage

(b) (4)

Warehouse procedures are implemented (b) (4)

(b) (4)

(b) (4)

. These requirements and associated procedures are outlined in [RJRT-SOP-000616 \[003\]](#) Manage Tobacco Materials Inventory.

3.2.3 A description of manufacturing steps, including the sources of all components, and quality control measures in place

Camel Snus is produced in a multi-step process, which consists of (b) (4) stages. These are:

- Tobacco Milling / Blending;
- Snus Processing;
- Pouching; and
- Packing and Casing.

Within each of these stages are a number of a sub-processes and quality checks that are described in detail in the sections below. These descriptions are supplemented with references to RJRT and ASC documentation for each process and related process flow diagrams.

3.2.3.1 Tobacco milling / blending

3.2.3.1.1 Description

(b) (4)

(b) (4)



3.2.3.1.2 Process diagram (tobacco milling / blending)

See [Figure 3.2-3](#) on the following page for a flow chart of the tobacco milling process.

Figure 3.2-3: Snus Process Primary Mill Line

(b) (4)



3.2.3.1.3 Quality checks during tobacco milling and blending

The quality checks employed during the tobacco milling and blending stage of Camel Snus manufacture are described in the Standard Operating Procedures and Work Instructions listed in [Table 3.2-31](#) and denoted in the workflow diagram with green diamonds.

(b) (4)

3.2.3.1.4 Related process documentation

Table 3.2-31: Documentation related to tobacco receiving and pre-production

Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	

Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	

Table 3.2-32: Documentation related to tobacco milling / blending

Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	

3.2.3.2 Snus processing (casings and heat-treatment)

3.2.3.2.1 (b) (4) production

(b) (4)

(b) (4)

(b) (4)



(b) (4)



Figure 3.2-4: Camel Snus Tobacco Blending Schematic

(b) (4)





(b) (4)



The internal standard operating procedures and work instructions that control the above activities are listed in [Table 3.2-33](#).

¹¹ (b) (4)

3.2.3.2.2

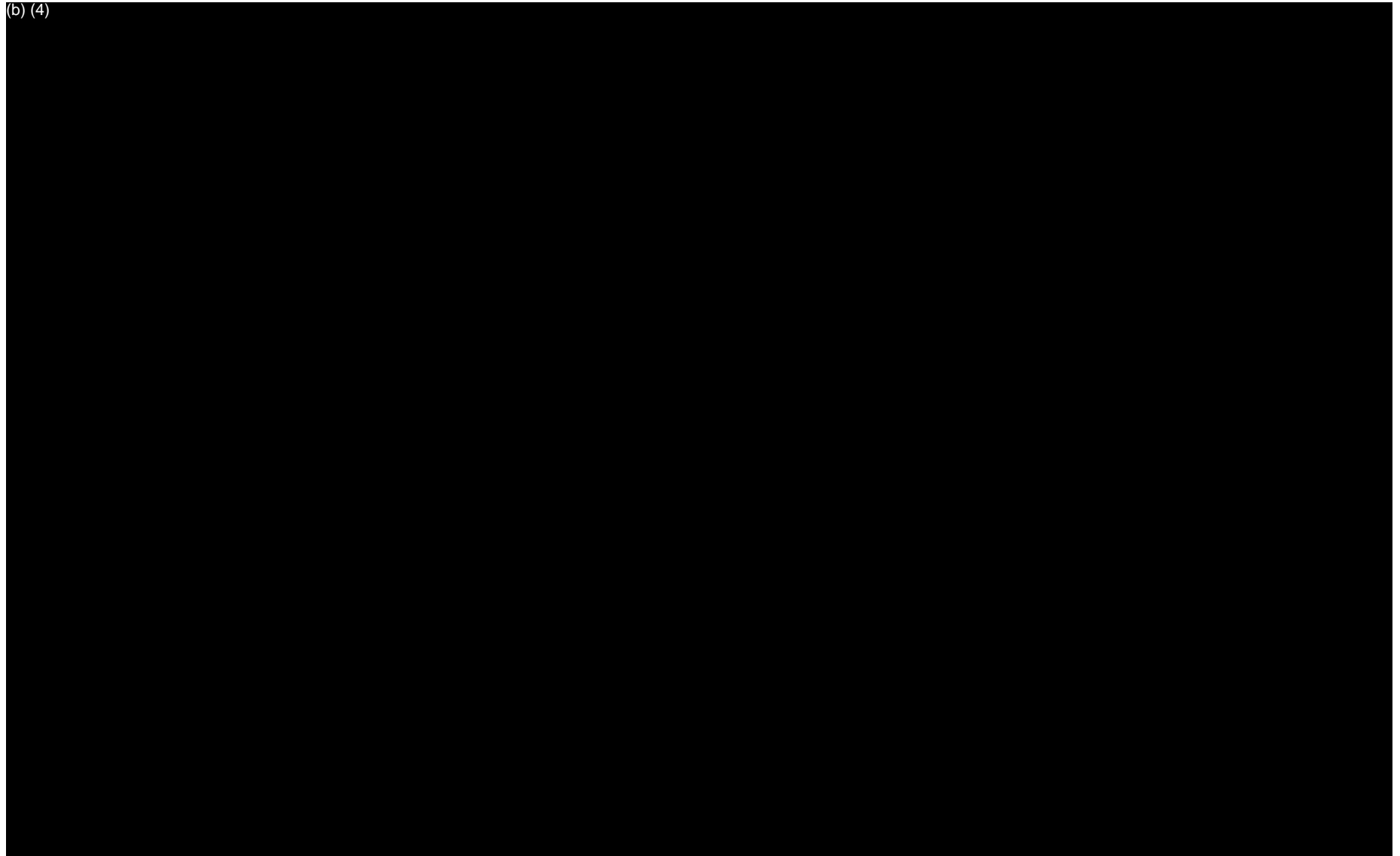
Process diagrams

(b) (4)

(b) (4)



Figure 3.2-6: Making of Camel Snus Flavor (b) (4)



3.2.3.2.3 Quality checks during tobacco processing


(b) (4)



3.2.3.2.4 Related process documentation

Table 3.2-33: Documentation related to Camel Snus casing addition and processing

Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	



Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	

3.2.3.3 Merz/GD pouching and packing

3.2.3.3.1 Description

(b) (4)

(b) (4)



3.2.3.3.2 Process diagrams (pouching and packing)

Figure 3.2-7: Pouching and Packing of Camel Snus Products on Merz Maker

(b) (4)



Figure 3.2-8: Pouching and Packing of Camel Snus Products on GD Maker

(b) (4)



3.2.3.3.3

Quality checks during product pouching and packing

(b) (4)



3.2.3.3.4

Related process documentation

Table 3.2-34: Documentation related to Camel Snus casing addition and processing

Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
---	-------------------

(b) (4)



Primary Standard Operating Procedure (SOP) or Work Instruction (WI)	Related Documents
(b) (4)	

3.2.3.4 Other product and process controls

(b) (4)

(b) (4)

3.2.4 A description of how the design, materials, ingredients, and heating source (if applicable) combine to produce the final product

A description of how the design, materials, and ingredients combine to produce the final product is detailed above in [Section 3.2.1](#), [Section 3.2.2](#), and [Section 3.2.3](#).

3.2.5 A quantitative description of the performance criteria for the tobacco product (e.g., burn rate, ventilation criteria, dissolution rate)

(b) (4)

Table 3.2-35: Final Design Characteristics - Camel Snus Frost (600 mg)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4))	(b) (4)			
(b) (4))				

Table 3.2-36: Final Design Characteristics - Camel Mint Frost (600 mg)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4)	(b) (4)			

Table 3.2-37: Final Design Characteristics - Camel Snus Mellow (600 mg)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4)	(b) (4)			

Table 3.2-38: Final Design Characteristics - Camel Snus Frost Large (1000 g)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4)	(b) (4)			

Table 3.2-39: Final Design Characteristics - Camel Snus Winterchill (1000 mg)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4)	(b) (4)			
(b) (4)				

Table 3.2-40: Final Design Characteristics - Camel Snus Robust (1000 mg)

Parameter	Unit of Measure	Specification Minimum	Specification Target	Specification Maximum
Final product moisture	(b) (4)			
pH				
Final product weight (portioned)				
Parameter	Unit of Measure	Minimum Expected Value	Expected Value	Maximum Expected Value
(b) (4)	(b) (4)			