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# 1. General Description and Technical Specifications

Model Series: Peltonen Knives, M23 Ranger Cub

The M23 Ranger Cub is a knife designed for outdoor activities, bushcraft, and carving. Technical Specifications

#### Knife

Total length: 165 mm

• Blade length: 65 mm

• Blade thickness: 3.3 mm

• Blade material: 80CrV2 Carbon Steel

• Blade hardness: HRC62 (induction-hardened)

• Spine hardness: HRC59

• Handle material: TPE Composite

#### Sheaths

• Materials: Leather and Kydex

• Sheath attachment loop: Polyester (leather sheath)

## 2. Features Relevant to Safety Assessment

- The sturdy construction of the knife enhances durability and reduces the risk of damage-related injuries.
- Ergonomic handle with a finger guard and non-slip material minimizes the risk of the knife slipping from the user's grip.
- Functional sheaths prevent accidental drops and enable safe handling.
- The hardness of the Kydex sheath material and the plastic insert inside the leather sheath protect against the blade puncturing the sheath material.

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# 3. Risk Analysis

A knife must have a sharp blade to fulfill its intended purpose. While the product is designed to be as safe as possible, a sharp blade and the use of the sheath may still pose safety risks.

#### 3.1 General Risks

Cuts:

The sharpness of the blade may cause cuts if used carelessly.

Prevention: The user manual includes proper cutting techniques and clear warnings.

#### Handle Slippage:

In wet or cold conditions, the handle may become slippery, leading to a loss of control.

Prevention: Ergonomic design and friction-enhancing handle material minimize this risk.

## Blade Breakage Risk:

Under heavy use, such as prying or striking hard materials, the blade may break, posing a safety hazard.

Prevention: The durable blade material and structure, along with instructions emphasizing proper use, mitigate this risk.

#### Storage and Transportation Risks:

Storing or transporting the knife without a sheath may lead to accidents, such as tripping or stumbling.

Prevention: The user manual stresses the importance of always using the sheath during storage and transportation.

#### Wearing the Sheath Around the Neck:

A lanyard or cord worn around the neck may become entangled on branches, protruding objects, or other obstacles, potentially causing a choking hazard.

Prevention: The user manual recommends attaching the sheath to a belt or another secure location. If the sheath is worn around the neck, the cord must be equipped with a safety lock or tied in such a way that it releases under reasonable tension.

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# **Document Maintenance and Updates**

This document covers all versions of the M23 Ranger Cub model and will be updated whenever significant changes are made to the product. The manufacturer will retain this document for at least 10 years after the product's market release and will provide it to authorities upon request.

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