

SAFETY DATA SHEET & USER MANUAL

High-Visibility Protective & Occupational Work Trousers
Models: KMZ173, KMZ174, KMZ175, KMZ176, KMZ177

1. Product and Company Identification

This document integrates technical safety parameters and operational guidelines for professional high-visibility workwear trousers distributed via **BAM24.PL**. These garments are engineered to satisfy professional occupational safety regulations regarding background material and retroreflective performance.

Product Code	Garment Size	Intended Use
KMZ173	Size M	Professional High-Visibility Workwear
KMZ174	Size L	Professional High-Visibility Workwear
KMZ175	Size XL	Professional High-Visibility Workwear
KMZ176	Size XXL	Professional High-Visibility Workwear
KMZ177	Size 3XL	Professional High-Visibility Workwear

Distributor Information

- **Company Name:** B.A.M. Andrzej Borowicz
- **Registered Address:** ul, Leśna 38, 86-031 Osielsko, Poland
- **Official Portal:** <https://www.bam24.pl>
- **Contact Reference:** biuro@bam24.pl

2. Material Composition and Technical Specifications

The KMZ trousers series features premium durable textiles engineered for demanding mechanical and weather conditions in heavy industry, logistics, and construction sectors.

- **Base High-Vis Textile:** UNIVERSAL SOFTSHELL is a top-quality softshell fabric made of 92% polyester and 8% spandex; the inside is lined with a layer of fleece. The fabric weight is 250 ±10 g/m².

- **Reinforcement Zones:** reflective tape and elements, as well as fluorescent yellow fabric. With a smooth outer surface and a warm fleece lining on the inside, they protect against the cold, wind, and rain, ensuring a high level of comfort.
- **Knee Pad Pockets:** Dual-layer ergonomic cavities specifically positioned at knee joints to receive protective foam inserts/knee pads.
- **Reflective Technology:** Premium retroreflective segment strips applied using advanced thermal bonding technology. Arranged circumferentially on both trouser legs to guarantee multi-directional visibility.

3. Hazard Identification and Operational Limitations

While these trousers provide advanced visibility and occupational utility, the user must strictly acknowledge the following physical constraints:

- **Thermal & Flammability Risk:** The high concentration of polyester in the textile blend makes the fabric susceptible to ignition and melting under thermal extremes. Do not utilize for arc welding, industrial grinding, or near open fires.
- **Mechanical Entanglement:** Unfastened tool loops, loosely hanging pocket flaps, or overly long hems present a entanglement risk near rotating machinery, gear shafts, or open conveyor belts.
- **Chemical Degradation:** The high-visibility fluorescent yellow/orange dyes can degrade if exposed to strong industrial solvents, highly alkaline chemicals, or acid splashing.
- **Visibility Depreciaton:** Accumulated soot, oils, mud, and lubricants significantly obscure retroreflective and fluorescent surfaces, decreasing safety below regulatory thresholds.

4. Operational Handling, Fitting, and Pre-Use Check

Mandatory Pre-Shift Inspection

- Verify that all retroreflective strips are completely exposed, clean, and free of localized peeling or crack defects.
- Inspect main seams, pocket bases, and crotch joints for any structural splitting or thread failure.
- Confirm full operation of heavy-duty fly zippers, main waist buttons, and tension-adjusting elastic tabs.

Correct Fitting & Ergonomics

- The trousers must sit correctly at the waistline. Never roll up or structurally shorten the trouser legs, as this alters the position or completely hides the lower reflective bands.
 - Ensure tool pockets are tucked or snapped in properly when working near active machine components.
-

5. Maintenance, Laundry, and Care Guidelines

Improper laundering is the primary cause of premature textile failure. Adhere strictly to the following parameters to avoid losing structural integrity and high-visibility status:

Maintenance Operation	Strict Parameters & Limitations
Washing Temperature	Maximum 40°C (104°F). Wash inside out using mild synthetic detergents to protect the reflective layer.
Fabric Softeners	CRITICAL PROHIBITION. Do not utilize liquid fabric softeners or cationic rinses. They coat the fabric and dull reflective properties.
Bleaching & Chlorine	Do not apply oxygen or chlorine-based bleaching agents. They cause irreversible fading of fluorescent dyes.
Tumble Drying	Air dry only. Do not place in mechanical tumble dryers. High heat can cause the thermal-bonded reflective strips to warp and delaminate.
Ironing Instructions	Iron at low temperatures (Max 110°C / 230°F) only on the reverse side. NEVER touch the iron directly to the reflective bands.

6. Storage, Lifespan, and Disposal

- UV Protection:** Store flat or on hangers in a clean, dark, and perfectly dry environment. Prolonged exposure to direct ambient UV rays or sunlight during warehouse storage will prematurely bleach the fluorescent color tones.
- End-of-Service Criteria:** The practical lifespan depends completely on local wear severity. The garment must be taken out of service immediately if the fluorescent fabric suffers permanent oil staining, or if reflective tape coverage falls below 90% due to abrasive wear.
- Eco-Safe Disposal:** The synthetic polyester and cotton mixture should be processed through specialized industrial textile recycling networks. Do not incinerate locally or dump in municipal streams.