

DuraChem®

Multi-Hazard Protection

DuraChem 200

Fabric Colors
Hi-Vis Yellow Navy



DuraChem® 200 Offers Triple-Certified Hi-Vis NFPA Protection

- DuraChem® 200 is the only breathable, Hi-Vis FR garment certified to or compliant with 3 NFPA standards:
 - Chemical – NFPA 1990 (1992)
 - Flame – NFPA 2112
 - Arc Flash – NFPA 70E
- Additional certifications and tests include Biological, Molten Metal Splash, and Steam and Hot Water.
- Multi-purpose 24/7 protection for day or night work applications.
- Breathable fabric reduces heat stress and improves worker comfort and productivity.
- Launderable garment and unique flexible hood options simplify PPE selection and inventory.
- Excellent ANSI 107 visibility and reflectivity performance (ANSI 107 only applies to hi-vis Yellow fabric).



DuraChem® 200

NFPA 1990 (1992) Chemical Test Battery*

Chemical	Holdout Time In Minutes
Butyl Acetate (>95%)	>60
Dimethylformamide (>95%)	>60
Fuel H	>60
Isopropyl Alcohol (>91%)	>60
Methyl Isobutyl Ketone (>95%)	>60
Nitrobenzene (>95%)	>60
Sodium Hydroxide (50%)	>60
Sodium Hypochlorite (10%)	>60
Sulfuric Acid (93.1%)	>60

*Chemical penetration testing was conducted in accordance with ASTM F903 Procedure C.

Biohazard Testing – Fabric & Seams

Test Method	Results
ASTM F1671 (blood & viral penetration)	Pass

Thermal and Burn Testing

Test Method	Results
Heat Thermal Performance (HTP) ASTM F2700	Spaced: 20.2 cal/cm2 Contact: 14.3 cal/cm2
Flame Resistance ASTM D6413	Char length: 1.06 in Afterflame: 0.0 sec
Thermal Protective Performance (TPP) ISO 17492	13.9 cal/cm2
Shrinkage/Heat Resistance ASTM F2894	8.0 %, 6.0 % WARP, WEFT
Manikin Body Burn (Pyroman) ASTM F1930 Exposed Head, min - 6.56%	6.56% predicted body burn
Heat Transfer Molten Substances ASTM F955	Aluminum @ 1400 F: 19.8sec to 2 ^o burn 34.6°C increase Iron @ 2800 F: no burn 11.7°C increase Sulfur @ 302 F: no burn 9.5°C increase
Electric Arc Rating ASTM F1959	APT _V = 13 cal/cm2
Steam 302° F @ 30 psi @ 2.4" University of Alberta (CAN/CSGB 155.20)	6.8 Seconds to 2nd Degree Burn 19.8 Seconds to 3rd Degree Burn
Hot Water (185° F @ 6L/min) @ 2.0" University of Alberta (CAN/CSGB 155.20)	No Burn

Comfort and Other Testing

Test Method	Results
Total Heat Loss ASTM F1868 Procedure C	492.9 W/m2
Evaporative Resistance ISO 11092 7.4	13.955 Pa-m2/W
Water Vapor Transmission ASTM E96	3158 g/m2-24hr
Cold Temperature Performance ASTM D747	0.009 in/lb

Hi-Visibility

DuraChem 200 meets the most stringent requirements of ANSI/ISEA 107-2015 as specified for Type R, Class 3, plus it is compliant with OSHA Roadside Emergency Response requirements. Does not apply to Navy fabric.



DuraChem® 200



Shown above are typical garment types for this fabric. View available styles and details at kappler.com

Attachable hood on jacket with secure hook-and-loop closure.

Navy color with optional reflective stripes is ideal for law enforcement.



Our labels work harder, and smarter. Kappler's unique SMART™ label makes sizing easy to see, and a quick QR code scan provides complete chemical data plus extensive suit details.

Adjustment straps at ankles and wrists, plus other unique design features.

Note: These tests were performed in accordance with ASTM or other appropriate testing methods by independent laboratories. This data is derived from tests performed on material samples only, not finished garments, with exception of Pyroman full-body manikin test. For a complete list of chemicals tested and additional tech data visit kappler.com.

WARNING: The information contained herein is based on technical data that Kappler believes to be reliable. It is subject to revision as additional knowledge and experience are gained. Please visit our website at www.Kappler.com ("Kappler Website") for the most up-to-date product information and specifications. All pamphlets, brochures or other literature or printed material may contain information that is not as current as the information on Kappler's website. Additionally, there are uses, environments and chemicals for which Kappler products, garments and/or fabrics are unsuitable. The user has the responsibility to review all available data and verify the product, garment and/or fabric is appropriate for the intended use and meets all specified government and/or industry standards for such use. The user should review all available information on the Kappler Website, product labels and QR codes to understand the appropriate uses and limitations of Kappler products, garments and fabrics. **CAUTION:** These garments are designed for protection of personnel against short duration thermal exposures. Do not use for firefighting applications. Minimize exposure to open flame or intense heat.

Durachem 200 contains PFAS. DuraChem 200 does not contain PFOA or PFOS chemistry.

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