

## FRONTLINE® 300

Frontline 300 is ideal for petrochemical line break situations. This innovative garment was developed with detailed input from petrochemical Safety Officers. The result is a single-fabric solution for combined chemical-flash fire protection.

Frontline 300 also offers radiant heat protection far superior to other so-called chemical/flash garments. Incorporating comparable protection to Kappler's Zytron® 300 chemical apparel, Frontline 300 provides excellent holdout for the most common petrochemical hazards.

From a design standpoint, an ensemble of hood, jacket and bib pants has proven to be the most versatile garment. The hood and jacket can be removed when not in the hot zone, thereby allowing the individual to ventilate. As with all Kappler apparel, this ensemble is a multi-use, single exposure garment (as is the Frontline 300 coverall).

### FEATURES AND BENEFITS

- › Ensemble garment for excellent versatility
- › Hood includes large, expanded-view face shield
- › Seams are sewn and then heat-sealed/taped

### APPLICATIONS

- › Petrochemical operations
- › Line maintenance
- › Tank cleaning
- › Refueling situations

### AVAILABLE STYLES

- › **Jacket - F3H675:** Zip front, raglan sleeve jacket, double storm flaps with FR hook & loop closure, collar, and cone inserts at sleeves.
- › **Bib Trouser - F3H660:** Bib trouser with adjustable webbing straps with snap-lock closure.
- › **Hood - F3H750:** Flat back, seams are sewn and then heat-sealed/taped.
- › **Ensemble - F3H630:** Includes jacket, bib trouser and hood.
- › **Coverall - F3H429:** Special-design hood, extended zipper closure, cone sleeve inserts, double storm flap. CE marked Type 3.



### ChemScan™ labels – another Kappler innovation

*Just scan the label with your mobile phone's QR reader for immediate access to a complete list of chemicals tested against your garment's protective fabric. Quick, accurate and only from Kappler – another industry first.*

**Frontline garments are designed for chemical flash fire protection  
FOR ESCAPE ONLY in the event of a chemical flash fire.**

## ASTM F1001 Chemical Test Battery

Chemical	Breakthrough Time (normalized)
Acetone	>480
Acetonitrile	>480
Carbon Disulfide	>480
Dichloromethane	10
Diethylamine	>480
Dimethylformamide	>480
Ethyl Acetate	>480
n - Hexane	>480
Methyl Alcohol	>480
Nitrobenzene	>480
Sodium Hydroxide	>480
Sulfuric Acid	>480
Tetrachloroethylene	>480
Tetrahydrofuran	>480
Toluene	>480

### GASES

Ammonia Gas	>480
1,3 Butadiene Gas	>480
Chlorine Gas	>480
Ethylene Oxide Gas	>480

### Other Chemicals Tested

Benzene	>480
Diesel Fuel	>480
Diethylethanolamine	>480
Gasoline	>480
Hydrofluoric acid (48%)	>480
Kerosene	>480
Methanol	>480

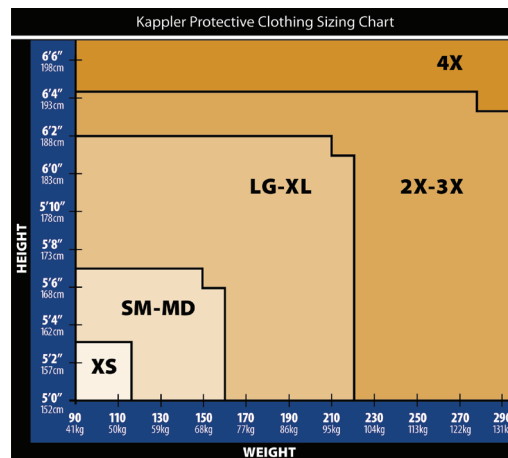
For complete list of chemicals tested, visit [kappler.com](http://kappler.com)



## Typical Physical Properties Measured per ASTM D751, D3787 and F1358

Test Method	Results - lbs/N
Grab Tensile Strength MD*	134 / 592
Grab Tensile Strength CD*	125 / 552.5
Tear Resistance Trapezoid Method MD*	13.7 / 60.6
Tear Resistance Trapezoid Method CD*	10.7 / 47.3
Ball Burst	123 / 543.7
Flammability Resistance	Pass

\*MD: Machine Direction \*CD: Cross Direction



Frontline® 300 has been tested for thermal protective performance (TPP) in accordance with ISO 17492, Clothing for Protection Against Heat and Flame.

Frontline 300 showed a TPP value of 16.

Frontline 300 meets the requirements for flame resistance in accordance with ASTM F1358.

**Note:** Sources for all chemical test data are independent laboratories. All tests were performed under laboratory conditions and not under actual use conditions. Tests were performed on material samples, not actual garments. All chemicals tested at 95% and 75° F except Sodium Hydroxide, tested at 50%.

**WARNING:** This information is based on technical data that Kappler believes to be reliable. It is subject to revision as additional knowledge and experience are gained. The website will contain Kappler's most up-to-date product information, and customers who receive pamphlets, brochures or other literature should be aware that such "hard copy" information may not be as current as the information on Kappler's website. Customers also should recognize that there are uses, environments and chemicals for which Kappler products, garments and/or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the product, garment and/or fabric is appropriate for the intended use and meets all specified government and/or industry standards. Also, the customer should review all available information on the website to understand the uses - and limitations - on ALL products, garments and fabrics which Kappler makes available. **CAUTION:** Do not use for fire protection. Avoid open flame or intense heat.