

Kappler Technical Data And Sizing Information.

ASTM F1001 Chemical Test Battery								
CHEMICAL	Zytron®						Frontline®	ChemTape®
	100	100XP	200	300	400	500	300	
Acetone	NT	NT	17	>480	>480	>480	>480	>480
Acetonitrile	NT	NT	52	>480	>480	>480	>480	>480
Carbon Disulfide	NT	NT	2	>480	>480	>480	>480	>480
Dichloromethane	NT	NT	2	44	88	>480	10	>480
Diethylamine	NT	NT	21	>480	>480	>480	>480	160
Dimethylformamide	NT	NT	77	240	>480	>480	>480	>480
Ethyl Acetate	NT	NT	14	>480	>480	>480	>480	>480
n-Hexane	NT	NT	7	>480	>480	>480	>480	>480
Methyl Alcohol	NT	NT	>480	39	>480	>480	>480	>480
Nitrobenzene	NT	NT	97	>480	>480	>480	>480	>480
Sodium Hydroxide	>480	>480	>480	>480	>480	>480	>480	>480
Sulfuric Acid	>480	>480	>480	>480	>480	>480	>480	>480
Tetrachloroethylene	NT	NT	21	>480	>480	>480	>480	>480
Tetrahydrofuran	NT	NT	3	>480	>480	>480	>480	>480
Toluene	NT	NT	6	>480	>480	>480	>480	>480
GASES								
Ammonia Gas	NT	NT	NT	39	NT	>480	>480	NT
1,3 Butadiene	NT	NT	NT	>480	NT	>480	NT	NT
Chlorine Gas	NT	NT	NT	>480	NT	>480	>480	NT
Ethylene Oxide Gas	NT	NT	NT	81	NT	>480	NT	NT
Hydrogen Chloride Gas	NT	NT	NT	>480	NT	>480	NT	NT
Methyl Chloride Gas	NT	NT	NT	>480	NT	>480	NT	NT

Typical Physical Properties for Zytron® (measured per ASTM D751)							
TEST METHOD	100	100XP	200	300	400	500	
Grab Tensile Strength MD*	32 / 142	49 / 217	52 / 231	70 / 311	94 / 418	80 / 359	
Grab Tensile Strength CD*	24 / 106	38 / 169	39 / 173	54 / 240	98 / 435	73 / 325	
Tear Resistance MD*	11.5 / 51	17.4 / 77	22.9 / 101.8	16.4 / 71	28.2 / 125.4	27 / 120	
Trapezoid Method CD*	7.4 / 32	10.3 / 45	9.6 / 42.7	25.2 / 111	33.3 / 148.1	15 / 67	
Ball Burst	28 / 124	46 / 204	43 / 191	53 / 236	121 / 538	79 / 351	

*MD - Machine Direction, CD - Cross Direction

Sources for all test data are independent laboratories. All tests were performed under laboratory conditions and not under actual use conditions.

NOTE: These tests were performed in accordance with ASTM standards by independent laboratories. This data is derived from tests performed on material samples only, not finished garments.

WARNING: There are uses, environments and chemicals for which these garments and/or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the garment and/or fabric is appropriate for the intended use and meets all specified government industry standards.

CAUTION: Do not use for fire protection. Avoid open flame or intense heat.

Need A Specific Chemical Tested?

Kappler now offers a free custom testing program.

If you need to document a Kappler fabric against a specific chemical hazard, we offer a custom testing program that makes it easy. When you order a standard minimum number of garments (varies by product), we will conduct custom third-party testing of your specific chemical at no charge. For details contact Customer Service at 1-800-600-4019 or customerservice@kappler.com.

Additional Frontline® 300 Data

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 which exceeds the minimum required by both NFPA 1991/1992 and NFPA 2112.

Frontline 300 has been tested for flame resistance in accordance with ASTM F1358 and meets requirements of NFPA 1991/1992.

Frontline 300 has been tested for flame resistance in accordance with ASTM 6413 and meets requirements of NFPA 2112.

Complete Chemical Data at kappler.com

The ASTM F1001 test battery represents only a fraction of the chemicals tested against Kappler fabrics – a list that’s constantly being expanded. Visit HazMatch® at www.kappler.com for the latest comprehensive list of chemicals in the Kappler database.

