Product Data Sheet

Manufacturer:	DACH Schutzbekleidung GmbH & Co. KG	
Trademark:	SAFE®	
Product:	ChemSafe	
REF:	54	

Classification:	CAT III according to the Personal Protective Equipment (PPE) Regulation (EU) 2016/425.							
Protection class:	**Type**	**Standard:**		**Description**				
	3	EN 14605		Protective clothing against liquid chemicals - Performance requirements for clothing with liquid-tight connections				
	4	EN 14605		Protective clothing against liquid chemicals - Performance requirements for clothing with spray-tight connections				
	5	EN 13982-1		Protective clothing for use against solid particulates - Part 1: Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates				
	6	EN 13034		Protective clothing against liquid chemicals - Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals				
	B	EN 14126		Protective clothing - Performance requirements and test methods for protective clothing against infective agents				
		EN 1149-1, EN 1149-5		Protective clothing - Electrostatic properties - Part 1: Test method for measurement of surface resistivity; Part 5: Material performance and design requirements				
		EN 1073-2		Protective clothing against radioactive contamination - Part 2: Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination				
								
Material:	SMS PP nonwoven laminated with PE film.							

Product description:	The ChemSafe protective suit from DACH provides reliable protection against chemicals even when pressurized up to 1.5 bar and against infectious agents. All advantages at a glance: ▪ The ergonomic cut offers a high degree of freedom of movement. ▪ The elastic waist area ensures a flexible fit with every movement and elastic arm cuffs with thumb loops for secure closure with gloves. ▪ The comfortable hood guarantees an optimal fit without slipping during work even with respirator and goggles. ▪ The cover flap of the double two-way zipper is self-adhesive and has an extra long chin cover for increased protection against liquids. ▪ All seams are welded and taped over to prevent liquids from penetrating through the seams. ▪ Reinforced material in the knee area to ensure optimum safety in all working positions.

Product performance:

Physical properties

Property	*Norm*	*Unit*	*Result*	*EN Class/Passed*
Abrasion resistance	EN 530 Met. 2	Cycles	> 2000	6
Flexural strength	EN ISO 7854	Cycles	> 100.000	6
Tear resistance	EN ISO 9073-4	N	> 20	Passed
Tensile strength	EN ISO 13934-1	N	> 60	Passed
Puncture resistance	EN 863	N	> 10	Passed
Surface resistance	EN 1149-1, EN 1149-5	Ω	$<1,3 \times 10^{8}$	Passed
Flame test	EN 13274-4 (Met. 3)	-	-	Passed
Seam strength - Trench tensile test	EN ISO 13935-2, EN 13034	N	> 125	Passed
pH value of the aqueous extract	EN ISO 3071, EN ISO 13688	pH	6.3	Passed

Resistance to penetration of liquid chemicals according to EN ISO 6529:2003:

Chemical	*Repellency index [%]*	*EN class*	*Penetration Index [%]*	*EN class*
Sulfuric acid (30%)	> 95	3	< 1	3
Sodium hydroxide (10%)	> 95	3	< 1	3

	Butanol-n	> 95	3	< 1	3
	Xylene	> 95	3	< 1	3
	Resistance to permeation of liquid chemicals according to ISO 6529:2003				
	Chemical	*Normalized breakthrough time at 1.0 µg / (min x cm²)*		*EN class*	
	Sulfuric acid (30%)	> 480 min		6	
	Caustic soda (10%)	> 480 min		6	
	Protection against infectious agents according to EN 14126:2004				
	Test method	*Norm*	*Unit*	*Result*	*EN class*
	Resistance to penetration of blood and body fluids - with synthetic blood.	ISO 16603	kPa	20	6
	Resistance to penetration of contaminated liquids - with bacteriophages	ISO 16604	kPa	20	6
	Resistance to penetration of infectious agents due to mechanical contact.	EN ISO 22610	min	> 75	6
	Resistance to penetration of contaminated liquid aerosols	ISO 22611	CFU*	Log_{10} > 5	3
	Resistance to penetration of contaminated solid particles	EN ISO 22612	CFU*	$Log_{10} \leq 1$	3
	▪ CFU = colony forming units				
	Performance of the whole suit				
	Test method	*Norm*		*EN Class/Passed*	
	Type 3: Jet test	EN ISO 17491-3		Passed	
	Type 4: Spray tight	EN 14605, EN ISO 17491-4		Passed	
	Type 5: Particle tightness test	EN ISO 13982, EN ISO 13982-2		Passed	
	Protection from radioactive particles	EN 1073-2		2	
Sizes:	M - XXXL				

Colour:	Yellow	
Packaging and variants:	**Packaging**	**Quantity**
	Bag	1 pcs.
	Shipping carton	25 pcs.
GTIN:	54/M	4049825004165
	54/L	4049825004172
	54/XL	4049825004189
	54/XXL	4049825004196
	54/XXXL	4049825004202
Use:	For single use. Please read the instructions for use before use. Check the protective suit for any damage. Do not use the protective suit if it is damaged.	
Storage:	Store dry in original packaging without direct sunlight. (see packaging) If the storage conditions are observed, the product has a storage life of 10 years. (see labeling on the product)	
Environmental sustainability and disposal:	In the case of contaminated products, the type and extent of contamination determines the disposal, and the applicable laws and regulations of the relevant country must be followed. A non-contaminated product can be thermally recycled or disposed of in landfills without releasing toxic substances.	