

VITAFLEX

This Is Revolutionary!
We Make Nonwovens Soft and Stretchy

VitaFlex LLC is the exclusive manufacturer creating novel elasticity from regular rigid nonwoven fabrics. This revolutionary technology is latex-free and utilizes no elastomeric polymers. It provides a process for treating nonwovens at high speeds, cost-effectively creating a wide range of practical cross-stretch elastic fabrics with unique performance characteristics.

Spunmelt Polypropylene Nonwoven Fabrics are a “breathable barrier” made by advanced fiber spinning technologies. They are a thin, yet dense, fiber-web material with ultrafine openings for air to flow through while maintaining particle filtration quality. They are commonly used for making air filters and surgical masks. Our patented technology allows us to make nonwoven fabrics soft and stretchy. This enables finished products to be form-fitting while maintaining their breathable barrier quality.

Our nonwovens are sourced from the most advanced lines in the southeastern states. The conversion and manufacturing processes are done in Burlington, North Carolina. The latex-free elastic nonwoven technologies and the materials have been globally co-patented by DuPont® and Dr. De-Sheng Tsai. Please visit our website www.VitaflexUSA.com for more information.

By combining fiber engineering and converting technologies, we developed a series of innovative soft-stretch head coverings to meet the safety requirements of many industries, for contamination control, primary head protection, biohazard & infection prevention, or for use as a hygienic helmet liner. To achieve their functionalities, the multiple-layer structure of the hoods is constructed with latex-free elastic fabrics each having distinct characteristics.

	Sot-stretch Hairnet	General Safety Hood	UV-Shield Hood UPF50+	Biosafety Hood
Structure	1-layer: SMS 25 gsm	3-layer: S/S/S 50 gsm	3-layer: S/S/S 55 gsm	3-layer: SMS/S/SMS 65 gsm
Intended Uses	Contamination Control	Primary Head Protection	Outdoor Primary Head Protection	Biohazard Prevention
Thickness	0.12 mm	0.30 mm	0.33 mm	0.35 mm
ΔP (mm H ² O/cm ²) MIL-M-36954C	< 1.5	< 2	< 2	< 3
Breathability/Perception	Normal/ Very Cool	Normal/ Very Cool	Normal/ Very Cool	Normal/Cool
Hydrostatic (cm H ² O) AATCC Test Method 127	15	20	22	32
Particle Filtration Efficiency @ 1 μ m ASTM F2299	-	80	75	95
Bacteria Filtration Efficiency ASTM F2101-14	-	-	-	85
Particle Shed Analysis Helmke Drum Particle Counts	585 of $\geq 0.3 \mu$ m	2,240 of $\geq 0.3 \mu$ m	-	1,850 of $\geq 0.3 \mu$ m
Synthetic Blood Penetration Resistance ASTM F1862	-	-	-	Pass at 80 mmHg

*The physical properties mentioned above represent typical values of **the fabric structure** of soft-stretch hoods. These values should not be considered as specification or certificate of material and or specification values.*

The VitaFlex Hairnet is made of a single-layer of premium grade elastic nonwoven SMMS composite with ultra-fine fibers and supremely uniform web formation. It is used for **Basic Isolation** in Infection Prevention and for **Contamination Control** in Cleanroom, Pharmaceutical Packaging, Medical Product Manufacturing, Electronics Assembly Lines, Plastic Molding, and Food Processing.

The max-cover version of hairnet has maximized the coverage of the wearer's scalp, face and neck, more than wearing a conventional bouffant cap, a beard cover and a face mask.

The translucent hairnet allows the wearer's face to be seen which gives a friendly appearance. The hydrostatic pressure resistance of the hairnet structure is 18 cm H₂O. It repels fluid droplets due to its dense fiberweb structure and the water-repellent characteristics of the polypropylene fibers it is made from.



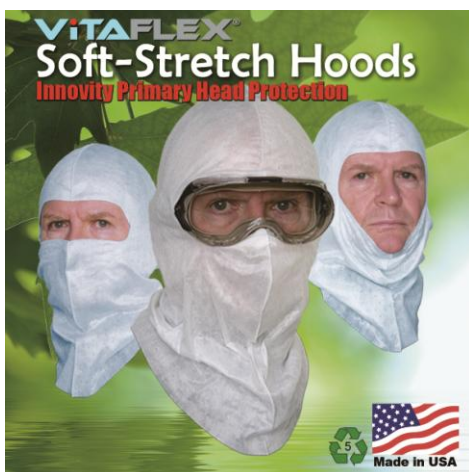
Max-cover Hairnet

- **Latex-free and non-allergenic**
- **100% Stretchability**
- **100% Machine manufactured, without human contamination from manual sewing or assembling**
- **100% Recyclable, replacing bouffant cap, conventional hairnet, and beard cover**

General Safety Hoods are an innovative PPE addition for **Primary Head Protection**. While working, any airborne particles or chemicals falling on the worker's head, face, or neck cause irritation and distraction. Job site contaminates getting in a worker's hair can also be carried around or taken home. Further, there is also the risk that these harmful substances could fall out of a worker's hair and into their eyes.

The triple-layer structure of soft-stretch hoods is constructed to effectively block wet or dry airborne particles, asbestos, glass fibers, powder, silica dust, sparks and paint or chemical overspray. It also shields against liquid splashes with a hydrostatic head resistance of 25 cm water column (about 0.35 psi). The material is recognized as a Class 1 flammability which was determined by having a burn time of less than 3.5 seconds when subjected to a flame test. In our internal testing, the sparks from a stick-welding melted or burned the surface of the triple-layer structure but did not cause catching fire. **It is believable that VitaFlex's Soft-stretch Hood will provide assurance in shielding the sparks when it is worn underneath a face shield on the wearer's head in a vertical position and at a distance of farther than 18" away from a welding spot.**

There are two colors: aqua-blue and white. The pleasing **aqua-blue hood** is popularly used by metal fabricators and medical professionals, or people who simply do not like pale-white. Its stretchability is engineered to fit the head size of 20"-27" circumference. **The white hood** is more elastic so it can be worn over many types of head gear. It is commonly used for chemical handling jobs such as pest control, powder coating, and spray foam.



The triple-layer structures were engineered to filter >80% particulates of 1 µm and larger at a flow rate of 1 cubic foot per minute (CFM) or 28.3 liters per minute (LPM). Since it fits tightly against the wearer's hair and skin, no air flows through the hood, so airborne particles rarely penetrate through to the wearer.

Please note: Our hoods are NOT a respiratory protection device and NOT for replacing mask in OSHA requirements

UV-Shield Hoods

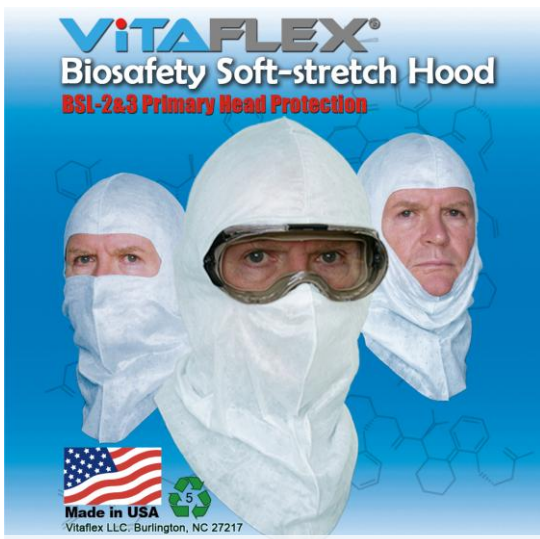
VitaFlex's UV-Shield Hoods are the best primary protective covering developed for outdoor workers who are exposed to sunlight for extended periods of time in their daily jobs (bridge, tank & tower painting, concrete cutting, constructions, oil rig & pipeline maintenance, highrise window washing, and ship deck duties),

The dense fiber-web structure and black pigments provide UPF50+ UV shielding protection in addition to its effectiveness of blocking airborne particles, debris, liquid splashes, and paint overspray.

- The UV-Shield Black Hoods are great for winter time or in cool weather. The black fabric effectively absorbs sunlight to enhance warmth retention.
- The UV-Shield Silver Hoods are specifically engineered for summer time. They have an outer layer constructed with shiny, silver-gray fibers to reflect sunlight and reduce heat absorption while the middle and inner layers of black provide UV shielding.



Biosafety Hoods



The Biosafety Hood's structure is qualified as a level 1 fluid barrier with resistance to synthetic blood penetration under 80 mm Hg sprayed at a distance of 30.5 cm, in addition to a particle filtration efficiency (PFE) of >95% against particles of 0.1 um and larger,

It is engineered for scientists and technicians working in a variety of bio-labs or when handling bio-hazardous materials (such as caring for corpses or moving animal remains in aftermath cleanup).

VitaFlex Biosafety Hood exceeded the requirements for the Spray Impact test for AATCC 42. (The test was performed by positioning the hood at a 45° angle, 0.6 m below a spray head). The water spray was repelled totally without penetrating or wetting its 3-layer structure. It was demonstrated that VitaFlex's Biosafety Hood withstood the 45 degree challenge – a vertical position will provide even more assurance.

- The thin, form-fit, and easy wearing VitaFlex Biosafety Hood can be comfortably worn underneath the coverall hood, keeping the wearer protected while the contaminated coverall suit is being removed. The hood should be the first PPE to be put on and the last taken off. Multiple hood-layering is suggested if contact contamination is a concern. That way, the outer layer can be removed upon being contaminated while the inner layer remains in place keeping the wearer protected.
- While in a potentially hazardous environment (ambulance, waiting room, emergency room, public venue) and wearing a full protective suit is not applicable, wearing our hood as an outer layer over a technical or a N95 mask provides a better protection. The hood can block droplets and particles from falling on head, and be removed first to reduce the risk of contact transmission.

VitaFlex's Hoods are NOT a respiratory protection device for replacing a mask or respirator required by OSHA.

Product List (available at www.vitaflexUSAstore.com)

	Uses	Style	Packaging	SKU	Price*
Hairnet	Basic isolation or Contamination control	Max Cover	Box of 200	BHN200-02	\$84/box
Hairnet		Max Cover	Case of 1,000	CHN1000-02	\$320/case
Hairnet		Max Cover	Case of 2,000	CHN2000-02	\$580/case
General Safety- White	Primary head protection	Full Cover	Box of 50	B050-01	\$68/box
General Safety- White		Full Cover	Case of 400	C400-01	\$292/case
General Safety- White		Open-Face	Box of 50	B050-00	\$68/box
General Safety- White		Open-Face	Case of 400	C400-00	\$292/case
General Safety- Aqua Blue	Primary head protection	Full Cover	Box of 50	B050-11	\$68/box
General Safety- Aqua Blue		Full Cover	Case of 400	C400-11	\$292/case
General Safety- Aqua Blue		Open-Face	Box of 50	B050-10	\$68/box
General Safety- Aqua Blue		Open-Face	Case of 400	C400-10	\$292/case
UV-Shield- Black	UPF50+ UV shielding	Full Cover	Box of 50	B050-21	\$71/box
UV-Shield- Black		Full Cover	Case of 350	C350-21	\$273/case
UV-Shield- Black		Open-Face	Box of 50	B050-20	\$71/box
UV-Shield- Black		Open-Face	Case of 350	C350-20	\$273/case
UV-Shield- Silver		Full Cover	Box of 50	B050-S1	\$74/box
UV-Shield- Silver		Full Cover	Case of 350	C350-S1	\$294/case
Biosafety- White	Biohazard prevention	Full Cover	Box of 50	BBS050-01	\$109/box
Biosafety- White		Full Cover	Case of 300	CBS300-01	\$474/case
Biosafety- Aqua Blue		Open-Face	Box of 50	BBS050-10	\$109/box
Biosafety- Aqua Blue		Open-Face	Case of 300	CBS300-10	\$474/case

* All prices are subject to change without prior notice. However, we reward repeat customers by holding their re-order price to that of their last order during the last 12 months.

- **Upon establishing a credit line with us**, you may conveniently place an order anytime by e-mail or fax, and our invoice will automatically show the discount price.
- **Repeat customers who order online at the new price** will be reimbursed the difference in 2 working days.

There are two styles:

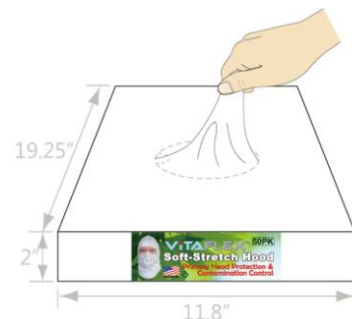
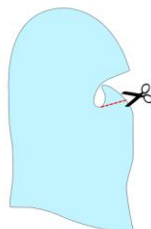


Full-cover Hood provides maximum coverage, forms air-pocket around nose and mouth and a tight fit around wearer's eyes.

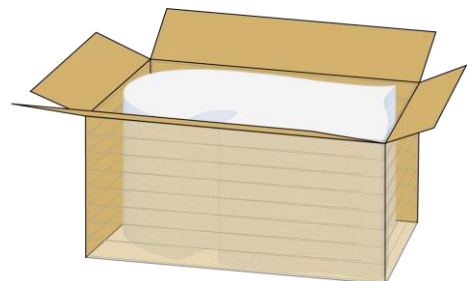
Open-face Hood gives the convenience of accommodating a full-face respirator. Its face opening is easy to pull down to cover just the mouth and chin.



To change the Full-Cover to Open-Face, simply cut off the nose with scissors prior to wearing.



Center-pull Dispenser Box
contains 50 hoods or 120 hairnets



Bulk Case
for 1,200 hairnets or 300-400 hoods