V-Gard **Winter Liners**

Technical Datasheet

Range overview

3 categories of V-Gard Winter Liners:

- **Supreme**: Offers multiple layers of warm flame tested fabric, to withstand arc exposure to an ATPV of 8 cal/cm2. Water repellent for outdoor operations
- **Select**: Offers two layers of flame tested fabric (until 25 or 50 washings) for extra warmth. Plus, some liners in this category offer quilted earflaps. Water repellent for outdoor operations
- **Value**: Provides excellent protection against cold with maximum economy

Focus on unique features

Resistance to Arc Exposure, with ATPV of 8 cal/cm² (Supreme):

- See details section “Approval & testing”

Flame retardancy (Select & Supreme)

- Resists burning when flame is present
- Two performance levels, See details section “Approval & testing”

Water Repellancy

- Fabric tested to water repellancy and resistance
- For details see last page

EN13463-1 Antistatic tested, see below ATEX classification

- V-Gard Value Liner Knit Cap (10118417): full compliance for Dust and IIC
- V-Gard Value Liner Knit Hat-Cap Cover (10118418): full compliance for Dust and IIB

Attachment to helmet suspensions for a perfect fit with leading V-Gard helmets

- 2 velcro straps, wrapped around helmet suspensions (Except 10118417/10118418)
- Offers proper stability and position
- Easy to don, no adjustment required

Ear Muffs compatibility

- Folds back on rear velcro for use with earmuffs won’t compromise hearing protector levels
- Earflap opens and stores with hook & loop on back of liner when in use

Neck Pocket for warming packet (Supreme only)

- Integrated pocket to place a warming packet for enhanced warmth
- Warming packet not supplied with liners, available in most sporting goods retailers

Knit Cap

- Can be worn under any model of cap/hat
- Perfect ear protection without obstructing vision
- Helmet remains stable on the head

Technical Specifications

Material		P/Ns
Outside Layer	Cotton Gray, 325gsm Cotton Yellow, 325gsm Black, 230gsm	**Select** 10129659, **Select** 10118424 **Supreme** 10118425, 10118427
Inside Layer	Cotton Green, 220gsm Cotton Grey, 220gsm Quilting (150gsm green fabric + 80gsm white felt)	**Select** 10129659 **Select** 10118424 **Supreme** 10118425, 10118427
Pipping Fabric	Cotton, Gray, 140gsm	**Select** 10129659, 10118424
Knit Fabric	300gsm 700gsm	**Select** 10129659 **Supreme** 10118427
Outside/Inside	100% cotton twil 100% acrylic 100% high-bulk acrylic	**Value** 10118419, 10118422 **Value** 10118418 **Value** 10118417

Range Overview & Ordering Information

P/N	Description		Key specs								Sale Unit
			Length	Warmth Level	Flame Retardancy	Withstands Arc Exposure	Water Repellency	Ear Muff compatible	High Visibility	Neck Pocket	
10118425		**V-Gard Supreme Liner, Extended,** FR consistent; Water repellant; With earmuff flaps; Arc resistance	Ext 370 mm	Warmest	✓	✓	✓	✓		✓	3
10118427		**V-Gard Supreme Liner, 2-piece, Extended** FR consistent; Water repellant; Arc resistance	Ext 370 mm	Warmest	✓	✓	✓			✓	3
10129659		**V-Gard Select Liner, 2-piece, Extended,** FR until 50 washings; Water repellant	Ext 370 mm	Warmer	✓		✓				12
10118424		**V-Gard Select Liner, Extended,** FR until 25 washings; Water repellant; Yellow Hi-visibility	Ext 370 mm	Warmer	✓		✓	✓	✓		12
10118417		**V-Gard Value Liner Knit Cap**	300 mm	Warm							12
10118418		**V-Gard Value Liner Knit Hat-Cap Cover** Can be worn over or underneath the helmet	Ext 370 mm	Warm					✓		12
10118419		**V-Gard Value Liner**	Short, 280 mm	Warm							12
10118422		**V-Gard Value Liner, Extended**	Ext 370 mm	Warm							12

Approvals & testing

Certification	
Standard	• CE certified (PPE Category 1) according at a minimum with PPE Directive 89/686/EEC Chapter 2, Article 8, Paragraph 3: "*EC type-examination shall not be required in the case of PPE models simple design where the designer assumes the user can himself assess the level of protection provided against the minimal risk concerned the effects of which when they are gradual, can be safely identified by the user on good time.- atmospheric agents of a neither exceptional nor extreme nature (seasonal clothing…)"* • All liners have been tested in combination with V-Gard helmets in our laboratory according to EN 397 • Liners are listed as Accessories in V-Gard helmets certificate • CE on product label to be considered for future production

P/N	Specification	Testing
SUPREME 10118425 10118427	**Flame retardancy:** V-Gard Supreme liners are made of special flame resistant fibers. Flame retardancy is consistent, can NOT be removed by washing unlike many other winter liners in the market	**ISO EN 14116: 2008, Protective clothing. Protection against heat and flame. Limited flame spread materials, material assemblies and clothing** (Paragraph 6.1 Thermal performance Fabric, 6.1.4 Thermal performance Seams) Test Reports 6565-15msa/6565-16msa EN ISO 14116:2008 specifies the performance requirements for the limited flame spread properties of materials, material assemblies and protective clothing in order to reduce the possibility of the clothing burning and therefore avoiding a hazard. Protective clothing complying with EN ISO 14116 is intended to protect workers against occasional & brief contact with small igniting flames, in circumstances where there is no significant heat hazard and without the presence of another type of heat
SELECT 10118424 10129659	**Flame retardancy up to 50 washes:** V-Gard Select liners have been chemically treated to ensure flame retardancy up to 50 washings (25 washings for 10118424)	
SUPREME + SELECT 10118424 10129659 10118425 10118427	**Water repellence:** V-Gard Select and Supreme liners are water repellent to ensure higher comfort for outdoor operations.	These liners where indicated have a minimum water repellent performance of Grade 3 according to **AATCC 22-2010** JTC Test reports
SUPREME 10118425 10118427	**Arc Exposure:** V-Gard Supreme liners offer protection for Arc Thermal Performance Value of 8 cal/cm2 Perfect combination with V-Gard 500 unvented, V-Gard frame & 2.5 mm PC visor.	These liners where indicated have a minimum Arc Thermal Performance Value of 8 cal/cm2 testing to **ASTM F1959.** ASTM F 1959/F 1959M-06 aε1 Standard Test Method for Determining the Arc Rating of Materials for Clothing, testing conducted by Kinectrics, Toronto, Canada, under report numbers 1108P33/ 1106P17
VALUE **10118417** **10118418**	**Antistatic:** V-Gard knit cap & V-Gard knit cap/hat cover has full antistatic performance for safe use in: - Dust / IIC => 10118417 - Dust / iiB => 10118418 All the other models have antistatic fabrics (IIB)	EN13463-1 Non electrical equipment for use in potentially explosive environment (ATEX) Testing done by INERIS: INERIS-DRA-12-129879-06115B