

Defense & Law Enforcement & Security & Safety Equipment & Supplies 46

Major Product category :Personal safety & protection - UNSPSC Code 4618

Sub Category :Safety apparel - UNSPSC Code 461815

Fire Retardant Overall for firefighting and rescue purpose (Protective coveralls) : UNSPSC Code - 46181503

S.No.	Parameters	CH/N	value 1	value 2	value 3	M/F/G	unit
Generic							
1	Fire Retardant Overall for firefighting and rescue purpose	ch	Fire Retardant Overall for firefighting and rescue purpose, single piece, dangri style, made from inherently flame resistant fabric suitable for use by Emergency Response and Fire & rescue personnel , exposed to challenging atmosphere of Fire, Heat, Electric Arc, Welding ,Molten Metal splatters should be breathable, with smart fitting and capable of providing comfort of movement to the user during emergency response and fire fighting and similar operation keeping in consideration Indian hot tropical climates.			G	
2	Size of overall	ch	S	M	L	G	Multi Select
		ch	XL	XXL	XXXL		
3	Colour of Protective FR Overall	ch	Royal Blue	Navy Blue	Orange Colour	F	Multi Select
			Red				
Constructional							
1	Fabric type for fabrication of the protective FR suit	ch	Inherently flame retardant having permanent heat and flame protection that cannot be removed or washed out throughout the life of the garment.			F	
2	Fabric composition	ch	made from a blend of meta aramide + para aramide + permanently flame resistant fibres + 2-3 % anti static yarn.			M	
3	Presence of Cotton, Nylon and Wool in febric yarn	ch	No			M	
4	The fabric shall be comfortable, breathable for reduced heat stress and ability to wick away moisture (anti sweating)	ch	yes			M	
5	Weight of the fabric	ch	$220 \leq N \leq 240$			M	GSM

6	The fabric of the FR Overall shall be of soft comfortable finish, durable and capable of washing as well be colour fast	ch	yes	M	
7	Stitching of the FR Overall	ch	stitched with FR aramid sewing thread to ensure that the seams have strength, elasticity, durability, stability, finish and colour fastness	M	
Design Features					
1	High protective collar with throat guard of height 10 cm Epaulettes (Flap) on each shoulder	ch	yes	M	
2	Opening of Overall	ch	front opening type having one central concealed heavy duty metal zipper with brass stud	M	
3	Full sleeves with single stud cuff fastening to facilitate rolling	ch	yes	M	
4	FR Overall (Dangri) Pockets	ch	1st Pocket - Radio pocket on left chest with Velcro on flap closure 2nd Pocket - Right chest, flap style with Velcro Closure 3rd Pocket Open Pen Pocket on shoulder 4th & 5th Pocket - Trouser cargo pocket at outer side of knee level (each side) with flap secured with Velcro closure	M	
5	Elasticized waistband additionally with loop and button shall be provided for smart fitting	ch	yes	G	
6	Trim size provided around arms, waist and legs	ch	(50mm) wide reflective FR trim		TBD
7	Reflective tape type	ch	fire retardant to EN 15025, triple trip design (Yellow-silver-yellow) and certified to EN 20471 tbr high visibility		
8	Printing of letter wording i.e. "FIRE" etc to be printed in silver colour at the back of the FR overall The height of the letters shall be 5 inches wordings of the letters to be provided at the time of Order finalization	ch	yes		

9	Markings / Stamping	ch	Labeling shall be provided on the garment showing Manufacturer Name, Size, Washing Instruction and EC Type Examination / CE certification for EN/ ISO 11612 ,EN ISO 11611, EN 61482-1 standards etc.		
10	The manufacturer of the Fire Retardant Overall must be supported by an authorization by the Fibre manufacturer such as DuPont -Nomex (or) equivalent	ch	yes	F	mm
11	Packing	ch	Each complete suit shall be packed in a good quality aesthetically designed bag with zipper. Each overall will be packed in and individual polythene cover	M	
PERFORMANCE					
1	The sample shall be tested at NABL/ILAC accredited textile labs for compliance of test parameters	ch	(i) Limited flame spread as per ISO 15025 - level A 1/A2 (ii) Convection heat as per ISO 9151 - level B (iii) Radiant Heat as per ISO 6942 - level C (iv) Contact Heat as per ISO 12127 - level F (v) Tensile strength as per ISO 13934-1 - \geq 400 Newton (vi) Tear strength as per ISO 13937-2 - \geq 20 Newton (vii) Limited Flame spread as ISO 15025 - Pass A2 (class 2) (viii) Electrical resistance as per EN 61482-1 (ix) Impact of spatter drop as per ISO 9150 - pass class (x) ATPV rating - \geq 8 cal/cm ² (xi) Anti Static property as per EN 1149		
Certification					
1	Certification	ch	Certified to the following International governing standards (1)EN ISO 11611:2015 (2) EN ISO 11612:2015 (3) EN 61482-1 :2009	M	
2	Manufacturer shall provide EC TYPE Examination Certificate from the Accredited International body for the offered garment in support of compliance to the above standard	ch	yes	M	

3	Availability of Test Report from Central Govt/NABL/ILAC accredited lab to prove conformity to specification	ch		M	
4	Test Report No	ch		M	
5	Test Report Date	ch		M	
6	Name of the Lab	ch		M	
7	Address of the Lab	ch		M	
8	Test Report to be provided to the buyer on demand	ch	Yes	M	
9	After Sale Support	ch	after sale service support and manufacturing facility in India for repair and wash care servicing for the offered FR overall	M	
10	Warranty	ch	02 year from the date of acceptance of the material.	M	