

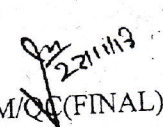

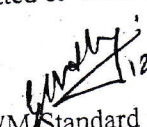


SPEC NO. OCF/INS /PVC MB BROWN
DATED 23.10.18

SPECIFICATION OF PVC MASTER BATCH BROWN

1.	Nomenclature	PVC MASTER BATCH BROWN	
2.	Use -	To be used for compounding/mixing(16 % approx) in PVC TYPE -4(Heat resistant PVC) for insulation of AP Mine Cable..	
3.	Relevant End Product spec	Controller of Inspection (Ammunition), Kirkee ,Pune Specification no IA 1314 (C) April 1974 or latest applicable for 55 m spools & in cable length up to 1.6 kms against IFD/ODD orders.	
4.	Relevant IS/BS Standard	BS: 6746--1976 or latest applicable,IS :5831-1984 or latest applicable	
5.	Specific Condition of Materials	Physical Condition : Granular	
5	Physical Properties	Physical test on Insulation before ageing As per BS	
		i Tensile Strength (min) 7.5 MPA/(N/mm ²)	
		ii Elongation (Min) 150 %.	
		Physical test on Insulation After ageing 135±2°C	
		i Variation in Elongation + 65 % Min	
		Cold bend test at -30°C±1°C from 2 to 4 Hr (Final Cable as per End prod spec clause 9.6)	No sign of Crack or Damage
		Heat shock test at 150°C±2°C for 1 Hr (Final Cable as per BS/IS at S.No.4)	No sign of Crack or Damage
		Shrinkage test at 150°C±2°C for 15 minute (Final Cable Spec/As per IS at S.No.4)	Shrinkage ,Max 4 %
		Loss of mass at 80°C ± 2°C for 7 days(As per BS 6746 :1976)/IS at S.No.4	2 mg/cm ² (max)
		Hot deformation test at 120°C ± 1°C for 6 Hr(Final Cable as per BS at S.No.4)	65% Max
		Accelerated Ageing test at 80°C ± 2°C for 7 days (Final Cable as per End prod spec clause 9.5.2)	The sample shall be reweighed and loss of mass calculated w.r.t. initial mass. The mean loss of mass shall not exceed 3% of the initial mass.
		Resistance to fluid test (Final Cable as per End prod spec clause 9.5.3)	There shall be no sign of splitting or cracking ,during or at the conclusion of the test ,the colour of the cable shall not be appreciably affected..
		Fire resistance test (Final Cable as per End prod spec clause 9.5.4)	Sample shall be complies with the following : a) The time of application of burner to the sample held vertically --for 60 seconds b)Maximum period of burning after removal of the flame --for 60 seconds c)Total length of core or cable decomposed --for 200 mm max.
		Abrasion Resistance test (final cable spec clause 9.3.1)	Shall withstand minimum 80 strokes
Color	Brown		
Electrical Properties	Insulation Resistance at 500 V DC for 1 minute after	Not less than 50 Mega ohm per km	

	<p>cable clause 9.4.6) Dielectric strength after immersion in water for minimum 12 hours at 500 V AC RMS for 15 minutes (final cable Spec clause 9.4.5)</p>	The cable shall withstand the test voltage without breakdown.
	<p>1) Minimum Insulation resistance constant at 20°C 2) Minimum Insulation resistance constant at 70°C (final cable as per BS)</p>	<p>0.35 Mega ohm Km 0.037 Mega ohm Km</p>
8	Packing	Material shall be free from all contaminations. The Material shall be packed in moisture free heavy duty polyethylene bags each containing 25 Kg of material.
9	Marking	Each bag shall be marked with the following information :
	a.	Manufacturer's Name
	b.	Specification or grade No. of materials
	c.	Batch No.: Batch number to be marked on sides of bags.
	d.	Month and Year of manufacture
	e.	Net weight
	f.	Each lot/batch shall be checked by supplier and accompanied by test certificate.
	g.	The material should be uniform in quality and condition, clean, free from foreign material and defects.
	h.	Shelf life

OCFC Specification No.: OCF/INS/PVC MB BROWN	Issue No. : 1 Dated- 12-12-18	Revision No. : - Dated : -	Page no. 2 of 2	
Initiated By-  JWM/INS	Approved By-  DO/GO INS	Verified by-  JWM/QC(FINAL)	Approved By-  DO/GO QC	Vetted & Issued By:  JWM/Standard cell 12-12-18