

Wire, Electrical, Fluoropolymer-Insulated, Copper or Copper Alloy

THIS AMENDMENT FORMS A PART OF AS22759A, DATED 2006-12-06

1. PRESENT REQUIREMENT:

3.5.3 INSULATION CONCENTRICITY AND WALL THICKNESS (SEE 4.5.13): THE CONCENTRICITY REQUIREMENT SHALL APPLY TO BOTH THE PRIMARY INSULATION AND THE FINISHED WIRE. THE CONCENTRICITY REQUIREMENT SHALL NOT APPLY TO TAPE-WRAP CONSTRUCTIONS. WHEN REQUIRED IN THE DETAIL SPECIFICATION, THE MINIMUM WALL THICKNESS SHALL BE AS SPECIFIED IN THE DETAIL SPECIFICATION.

CHANGE REQUIREMENT:

3.5.3 INSULATION CONCENTRICITY AND WALL THICKNESS (SEE 4.5.13): THE CONCENTRICITY SHALL BE 70% UNLESS OTHERWISE SPECIFIED. THE CONCENTRICITY REQUIREMENT SHALL APPLY TO BOTH THE PRIMARY INSULATION AND THE FINISHED WIRE. THE CONCENTRICITY REQUIREMENT SHALL NOT APPLY TO TAPE-WRAP CONSTRUCTIONS. WHEN REQUIRED IN THE DETAIL SPECIFICATION, THE MINIMUM WALL THICKNESS SHALL BE AS SPECIFIED IN THE DETAIL SPECIFICATION.

RATIONALE FOR CHANGE:

THE REQUIRED AS22759 CONCENTRICITY WAS OMITTED IN THE AS22759A.

2. PRESENT REQUIREMENT:

3.5.7 INSULATION CIRCUMFERENTIAL ELONGATION FOR (EXTRUDED PTFE OR ABRASION RESISTANT PTFE INSULATION), SEE 4.5.1.2.3: THE THIN INSULATION SLUG SHALL NOT SPLIT OR CRACK.

CHANGE REQUIREMENT:

3.5.7 INSULATION CIRCUMFERENTIAL ELONGATION FOR (EXTRUDED PTFE OR ABRASION RESISTANT PTFE INSULATION) SEE 4.5.1.2.3: THE CIRCUMFERENTIAL ELONGATION SHALL BE IN ACCORDANCE WITH TABLE 1.

RATIONALE FOR CHANGE:

METHOD REQUIRES SLUG ELONGATION TO BE MEASURED.

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### 3. PRESENT REQUIREMENT:

#### 3.6.15 FLAME RESISTANCE (SEE 4.5.18) LINE 1

UNLESS OTHERWISE SPECIFIED IN THE DETAIL SPECIFICATION, THE WIRE INSULATION, ONCE THE FLAME HAS BEEN REMOVED, SHALL BE SELF EXTINGUISHING PRIOR TO THE TIME SPECIFIED IN THE DETAIL SPECIFICATION AND FLAME TRAVEL SHALL NOT EXCEED THE SPECIFIED LENGTH.

#### 4.5.18.2 PROCEDURE (LINE 8)

AT THE CLOSE OF THE APPLICATION PERIOD, THE FLAME SHALL BE WITHDRAWN AND THE DURATION OF THE AFTER FLAME IN THE SPECIMEN SHALL BE NOTED.

#### CHANGE REQUIREMENT TO:

#### 3.6.15 FLAME RESISTANCE "FLAMMABILITY" (SEE 4.5.18) LINE 1

UNLESS OTHERWISE SPECIFIED IN THE DETAIL SPECIFICATION, ANY FLAME IN THE WIRE INSULATION SHALL BE SELF EXTINGUISHING WITHIN A MAXIMUM OF 3 SECONDS AFTER REMOVAL OF THE EXTERNAL FLAME SOURCE FROM THE INSULATION. WHEN SPECIFIED IN THE DETAIL SPECIFICATION, THE FLAME TRAVEL SHALL NOT EXCEED THE SPECIFIED LENGTH.

#### 4.5.18.2 PROCEDURE (LINE 8)

AT THE CLOSE OF THE APPLICATION PERIOD, THE FLAME SHALL BE WITHDRAWN AND THE DURATION OF THE AFTER FLAME AND THE BURNED LENGTH OF THE SPECIMEN SHALL BE MEASURED AND RECORDED.

#### RATIONALE FOR CHANGE:

THE REQUIRED FLAME EXTINGUISHING TIME OF 3 SECOND MAXIMUM WAS OVER LOOKED IN THE AS22759A REVISION. REQUIREMENT NEEDS TO BE INCLUDED TO PERMIT QUALIFICATION AND APPLICATION OF FLAMMABILITY. TITLE CHANGE NEEDED TO BE COMPATIBLE WITH TERM USAGE.

### 4. PRESENT REQUIREMENT

#### TITLE- 3.6.20 INSULATION CROSSLINK PROOF AND ACCELERATED AGING (SEE 4.5.21)

LINE 1- WHEN THE INSULATION CROSSLINK PROOF AND ACCELERATED AGING IS REQUIRED IN THE DETAIL SPECIFICATION, CHANGE IN MARKING, COLOR, OR PITTING SHALL NOT BE CONSIDERED.

#### TITLE- 4.5.2.1 INSULATION CROSSLINK PROOF AND ACCELERATED AGING

LINE 1- THE CROSSLINK PROOF TEST OR ACCELERATED AGING TEST SHALL BE PERFORMED IN ACCORDANCE WITH MIL-STD-2223 METHOD 4003 FOR THE HOURS AND TEMPERATURE SPECIFIED IN THE DETAIL SPECIFICATION.

#### CHANGE REQUIREMENT

TITLE- 3.6.20 INSULATION CROSSLINK PROOF/ ACCELERATED AGING/ SHORT-TERM THERMAL STABILITY (SEE 4.5.21)

LINE 1- WHEN THE TEST IS REQUIRED IN THE DETAIL SPECIFICATION, CHANGE IN MARKING, COLOR, OR CONDUCTOR PITTING SHALL NOT BE CONSIDERED

#### TITLE- 4.5.21 INSULATION CROSSLINK PROOF/ ACCELERATED AGING/ SHORT-TERM THERMAL STABILITY

LINE 1- THE TEST SHALL BE PERFORMED IN ACCORDANCE WITH MIL-STD-2223 METHOD 4003 AS SPECIFIED IN THE DETAIL SPECIFICATION.

## 5. PRESENT REQUIREMENT

## TABLE 4- QUALIFICATION AND QUALITY CONFORMANCE REQUIREMENTS

INSULATING MATERIAL 4.4.5.2  
 CONDUCTOR ELONGATION 4.4.12  
 CONDUCTOR TENSILE BREAK STRENGTH 4.4.12.2  
 CONDUCTOR STRANDING 3.4.1.3  
 CONDUCTOR DIAMETER 3.4.1.4  
 CONDUCTOR RESISTANCE 3.4.1.5  
 DIAMETER  
 MARKING DURABILITY  
 INSULATION SHRINKAGE  
 INSULATION LOW TEMPERATURE RESISTANCE  
 INSULATION THERMAL SHOCK  
 INSULATION CROSSLINK PROOF AND ACCELERATED AGING  
 INSULATION WRAP  
 CONTINUOUS LENGTH 4.3.4.1.3  
 LIFE CYCLE

## CHANGE REQUIREMENT

## TABLE 4- QUALIFICATION AND QUALITY CONFORMANCE REQUIREMENTS

INSULATING MATERIAL 4.5.1.2  
 CONDUCTOR ELONGATION 4.5.12  
 CONDUCTOR TENSILE BREAK STRENGTH 4.5.12.2  
 CONDUCTOR STRANDING 3.4.1.2  
 CONDUCTOR DIAMETER 3.4.1.3  
 CONDUCTOR RESISTANCE 3.4.1.4  
 DIAMETER 5/  
 MARKING DURABILITY 5/  
 INSULATION SHRINKAGE 5/  
 INSULATION LOW TEMPERATURE RESISTANCE 5/  
 INSULATION THERMAL SHOCK 5/  
 INSULATION CROSSLINK PROOF/ ACCELERATED AGING/ SHORT-TERM THERMAL  
 STABILITY 5/  
 INSULATION WRAP 5/  
 CONTINUOUS LENGTH 4.4.4.1.3  
 LIFE CYCLE 5/

5/ QUALIFICATION TESTS SHALL ONLY BE PERFORMED BY THE QUALIFYING ACTIVITY UNLESS OTHERWISE SPECIFIED IN THE DETAIL SPECIFICATION (SEE 4.4). THIS REQUIREMENT DOES NOT RELIEVE THE SUPPLIER (MANUFACTURER) FROM PERFORMING THE SPECIFIED QUALITY CONFORMANCE TESTS.

## RATIONALE FOR CHANGE:

CORRECT PARAGRAPH REFERENCES. ALSO, THE PREPARING ACTIVITY HAS DETERMINED THAT THIRD PARTY TESTING IS NEEDED FOR SPECIFIED TESTS AND THAT THE QUALIFYING ACTIVITY SHOULD PERFORM THOSE TESTS INDEPENDENT OF THE SUPPLIER.

6. PRESENT REQUIREMENT:

4.4 QUALIFICATION INSPECTIONS: QUALIFICATION INSPECTIONS INCLUDE THE INITIAL QUALIFICATION INSPECTION (4.4.1) AND INSPECTION FOR RETENTION OF QUALIFICATION (4.4.2).

CHANGE REQUIREMENT:

4.4 QUALIFICATION INSPECTIONS: QUALIFICATION INSPECTIONS INCLUDE THE INITIAL QUALIFICATION INSPECTION (4.4.1) AND INSPECTION FOR RETENTION OF QUALIFICATION (4.4.2). THE QUALIFYING ACTIVITY SHALL PERFORM THE TESTS DESIGNATED IN TABLE 4. THE QUALIFYING ACTIVITY SHALL PROVIDE A DATA PACKAGE TO THE SUPPLIER. THE SUPPLIER IS NOT REQUIRED TO PERFORM THE TESTS. THIS REQUIREMENT DOES NOT RELIEVE THE SUPPLIER (MANUFACTURER) FROM PERFORMING THE SPECIFIED QUALITY CONFORMANCE TESTS.

RATIONALE FOR CHANGE:

THE PREPARING ACTIVITY HAS DETERMINED THAT THIRD PARTY TESTING IS NEEDED FOR SPECIFIED TESTS AND THAT THE QUALIFYING ACTIVITY SHOULD PERFORM THOSE TESTS INDEPENDENT OF THE SUPPLIER.

7. PRESENT REQUIREMENT:

4.4.3.1 QUALITY CONFORMANCE PROCESS CONTROL INSPECTION, LAST LINE "MIL-C-22909"

CHANGE REQUIREMENT:

4.4.3.1 QUALITY CONFORMANCE PROCESS CONTROL INSPECTION, LAST LINE "MIL-W-29606"

RATIONALE FOR CHANGE:

INCORRECT SPECIFICATION RERERENCE

8. PRESENT REQUIREMENT:

4.5.1.3.2 IMPULSE DIELECTRIC TEST OF A PRIMARY INSULATION: PERFORM IN ACCORDANCE WITH IMPULSE DIELECTRIC TEST (SEE 4.4.6.1).

CHANGE REQUIREMENT:

4.5.1.3.2 IMPULSE DIELECTRIC TEST OF A PRIMARY INSULATION: PERFORM IN ACCORDANCE WITH IMPULSE DIELECTRIC TEST (SEE 4.5.6.1).

RATIONALE FOR CHANGE:

CORRECT PARAGRAPH REFERENCES