Coded Note Number: C3010
Revision Level: C001
Date: March 21, 2017
Title: TAPE (EXCEPT PPP-T-60) DETRIMENTAL TEST REPORTS

This revision history is provided for convenience and does not alleviate the supplier’s responsibility with understanding and complying with the full coded note.
Change from Revision A – Editorial change to reformat to current standard.
Bolded font indicates changed/added content.
[Text deleted] inserted in the document indicates the removal of content.

Quantity: One (1) copy test reports for the following:

The vendor shall have the tape tested in accordance with Appendix A, Section 60 of MIL-STD-2041, control of detrimental materials, and with each shipment submit one copy of chemical test reports showing the tape does not exceed the following materials’ detrimental material limits (maximum).

- Bromides 250ppm (leachable)
- Chlorides 500ppm (leachable)
- Fluorides 250ppm (leachable)
- Sulfur 500ppm (leachable)

Testing for detrimental materials is required for each lot supplied to NNS.

The vendor will have the tape tested per 40 CFR 261 Appendix II Method 1311 and will provide certification that the tape meets the limits shown in 40 CFR Chap. 1 Sec. 261.24 Table 1.

The vendor will provide certification that the tape has been approved for incineration by the G.T.S Duratek (Oak Ridge, TN. 37830- 2530) Vendor Certified Incinerable program.

Tape specifications:

1. Each roll of tape will be marked with its manufacturers run/lot number.
   The tape will be red in color.

2. The tape will meet the specifications noted below and the vendor will provide reports to:
   The Technical Section, Radcon Engineering
On the tape's properties compared to these specifications in accordance with the schedule noted below:

3. Properties tested each and every lot: reported quarterly.

4. Thickness of tape in mils per ASTM-D3652: Target, 13.0; Minimum 11.4; Minimum CPK, 1.75.

5. Weight of tape in oz/yd(sq) per ASTM-E171: Target, 11; Minimum 9.5; Minimum CPK, 2.00.

6. Tensile strength in lbs/in. per ASTM-D3330; Target, 40; Minimum, 30; Minimum CPK 0.85.

7. Adhesion to steel in oz/in PER ASTM-D3330; Target, 47; Minimum, 40; Minimum CPK, 0.60.

8. Adhesion to backing in oz/in per ASTM-D3330; Target, 43; Minimum 35; Minimum CPK 0.65.

9. Elongation in percent per ASTM-D3759; Target 12; Minimum, 5; CPK, TBD.

10. Note: CPK is defined in accordance with the following calculations:

    (1) Calculate the CPU (Upper Process Capability) defined as the (upper specification limit-process average)/3 standard deviations.

    (2) Calculate the CPL (Lower Process Capability) defined as the (process average-lower specification limit)/3 standard deviations.

    (3) Calculate the CPK defined as the lower of CPU or CPL (CPK = minimum CPL, CPU).

11. Properties tested and reported quarterly.

12. Unwind of tape in lbs/in. Per ASTM-D3811; Minimum, 4.2.

13. Twist on unwind per ASTM-D3813; Maximum, 15 Degrees.

14. Curl on unwind per ASTM-D3813; Maximum, 7 Millimeters.

15. Hand tearability in lbs/in. Per ASTM-D624-73; Maximum, 8.5; Target, 7.2; CPK, TBD.
16. Properties tested at product development and reported quarterly.

17. Cloth backing of the tape in thread counts per inch; Warp-Maximum, 46; Target, 44; Minimum, 42.

18. Cloth backing of the tape in thread counts per inch; Fill-Maximum, 30; Target, 28; Minimum, 26.

19. Backing thickness; Maximum, 2.75 mil; Target, 2.5 mil; Minimum, 2.25 mil.

20. Water penetration rate of the tape per ASTM-D3816; Maximum, 3 grams of H2O/100IN SQ/24 hr.

21. Flame spread of the tape per UL 723; Maximum Index Value, 5.

22. Smoke developed per UL 723; Maximum Index Value, 20.

23. Holding power of the tape to kraft paper as per ASTM-D3654; Minimum, 20 minutes.

24. Holding power of the tape to Herculite as per ASTM-D3654; Minimum, 15 minutes.

25. Holding power of the tape to stainless steel at room temperature as per ASTM-D3654; Minimum, 60 minutes.

26. Holding power of the tape to stainless steel at 120 Deg F. As per ASTM-D3654; Minimum, 60 minutes.

27. Maximum performance temperature; Minimum, 200 Deg F.