Westinghouse Electric Corp.
Sharon, Pa.

Purchasing Dept. Spec. 7336 M
(Not for publication)

INERTEEN

1. This specification covers nonflammable insulating liquid used in specific designs of transformers where the fire hazard of insulating oil is to be eliminated. It is designated as Inerteen 7336-9. The material is a mixture of 60 per cent chlorinated diphenyl, and 40 per cent trichlorbenzene, by weight, with 0.20 per cent phenoxypropene oxide added.
2. No change shall be made in the quality of successive shipments of material furnished under this specification without first obtaining the approval of the purchaser.

CHEMICAL AND PHYSICAL PROPERTIES AND TESTS

3. PHENOXYPROPENE OXIDE CONTENT: The Inerteen shall contain 0.18 to 0.22 per cent by weight of phenoxypropene oxide.
4. NEUTRALIZATION NUMBER: The neutralization number shall be less than 0.014 mg. of KOH when determined in accordance with ASTM D-974.
5. FREE CHLORIDES: The material shall not contain more than 0.10 ppm of free chlorides when determined in accordance with ASTM D-901.
6. CONDITION: The material shall be clear.
7. SPECIFIC GRAVITY: The specific gravity at 15.5 C/15 C (60 F/60F) shall not be less than 1.560 nor more than 1.568 when determined in accordance with ASTM D-901.
8. VISCOSITY: The viscosity at 37.8 C (100 F) shall be 54 seconds, plus or minus 2 seconds, when determined by Saybolt Universal Viscosimeter in accordance with ASTM D-88.
9. COLOR: The color shall be not greater than 150 A.P.H. when tested in accordance with ASTM D-901.
10. FIRE POINT: The material shall have no fire point when tested according to ASTM D-92 to its boiling point.
11. CHEMICAL STABILITY: There shall be no generation of free chlorides when a specimen is refluxed with distilled water for six hours in the presence of air.
12. POUR POINT: The pour point shall be lower than minus 32 C (-25.6F) when determined in accordance with ASTM D-97.
13. DIELECTRIC STRENGTH: The dielectric strength at point of shipment shall not be less than 35,000 volts and not less than 30,000 volts at destination when tested in accordance with ASTM D-877.
14. ELECTRICAL RESISTIVITY: The electrical resistivity at 100 C (212F) when tested at 500 volts D-c shall not be less than 100 x 10^9 ohms/cm^3.
15. CORROSION: After heating with the bright aluminum for six hours at 200-220 C (392-428 F), the aluminum shall not be corroded either on visual inspection or weight determination, and the Inerteen shall conform to the following:

Color, Max	400 A.P.H.
Acidity, Max	0.014
Free Chlorides, ppm, Max	5.0
Condition	Clear

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16. REFRACTIVE INDEX: The refractive index at 25 C (77 F) shall not be less than 1.6137 nor more than 1.6157 when tested according to ASTM D-901.

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17. TEST METHODS: The test for phenoxypropene oxide shall be made in accordance with Westinghouse Electric Corporation Material Test Specification 80166, which shall be considered a part of this spec.

PACKING AND MARKING

18. PACKING: Shipping containers shall conform to the requirements of Westinghouse Electric Corp. Purchas. Dept. Spec. 6824 2.

19. MARKING: (19.1) Containers other than tank cars shall be marked in accordance with the requirements of Westinghouse Electric Corporation Purchas. Dept. Spec. 6824-2.

(19.2) Each tank car shall have a packing slip bearing the following information: Purchase Order Number; P D Spec 7336-9-M; Batch Number; Number of Gallons; Name of Manufacturer.

INSPECTION

20. Inspection: The manufacturer shall furnish the Purchasing Agent of the Westinghouse Electric Corporation a test report of the tests made in accordance with Sections 3 to 17 inclusive of this specification on each shipment of Inerteen.

21. SAMPLES: (21.1) For Inerteen shipped to any Westinghouse plant except Sharon, Pennsylvania, the manufacturer shall furnish a one quart sample from each shipment to the purchaser by parcel post.

(21.2) For shipment of Inerteen to the Sharon, Pennsylvania Works in lieu of samples the manufacturer shall furnish a certified test report of the tests made in accordance with Sections 3 to 16 inclusive of this specification on each tank car or shipment of drums.

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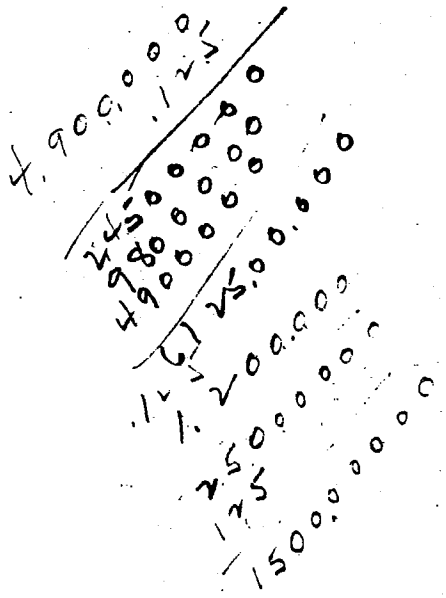

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