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Submitted by: Scotch Corporation

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Attn: Todd Elms

Date: March 2, 2016

Revision Date: September 20, 2016

Report No: 48803-R

REPORT

Lab Sample	No. Five (5) Drain Cleaner Samples
48803-2	Instant Power Professional Heavy Duty Drain Opener (#1969 01/15)
48803-4	Zep – 10 Minute Hair Clog Remover (E5261A1 08:53)
48803-5	Zep - Liquid Heat (E5173A1 10:30)
48803-7	Drano Max Gel (N341 18:15)
48803-8	Liquid Plumr – Hair Clog Eliminator (C615350)

PROCEDURE

The listed drain cleaners are tested for their hair dissolving efficiency. Test conditions are using human hair in water with intermittent manual stirring at 75±5°F ambient temperature. Test is 300ml of drain cleaner mixed with 300ml of water. To those samples that dissolve hair, more hair is added daily. Test duration is twelve days, with hair added as needed for nine days.

RESULTS

Sample	Dissolved Hair, gr
48803-2	155.0+
48803-4	5.47
48803-5	7.22
48803-7	9.75
48803-8	55.0+

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DISCUSSION

Sample 48803-2 still had dissolving capacity, but testing was terminated at client request. Solution was extremely thick at the end of the test.

Sample 48803-8 took several days to dissolve added hair; compared to sample 48803-2 which dissolved added hair in 24 hour periods. Hair was added every three days to sample 48803-8 and sample still had dissolving capacity after twelve days of test.

Sample 48803-2 had a noted ammonia odor at each hair addition point. The other four samples all had a chlorine smell. Three of these four samples showed no more dissolution after one day, but were allowed to sit with stirring for the full twelve days.

The Instant Power sample (48803-2) dissolved the following comparative amounts of hair:

- 28.3 times more hair than Zep 10 Minute Hair Clog Remover (48803-4)
- 21.5 times more hair than Zep Liquid Heat (48803-5)
- 15.9 times more hair than Drano Max Gel (48803-7)
- ≈3 times more hair than Liquid Plumr Hair Clog Eliminator (48803-8)

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Kevan W, Jones, Vice President

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