

Adapt Lubricating Deodorant A Novel Pouch Additive with both Deodorizing and Lubricating Benefits

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Abstract

Two major challenges that people with ostomies face while using ostomy pouching systems involve odor associated with discharge and the difficulty in emptying fecal matter from the pouch. Adapt Lubricating Deodorant, a lubricating deodorant developed by Hollister Incorporated and described in this paper, solves both problems by acting simultaneously as an odor neutralizer and a pouch lubricant.

Background

People with ostomies are advised to empty or change their pouches when they are one-third full.¹ With one-piece and two-piece drainable pouches, emptying can be achieved by releasing the closure at the bottom of the pouch. The bottom closure may be an integrated closure or plastic clamp. To minimize accidents, people with ostomies are advised to drain the pouch while sitting on the toilet, and placing the pouch between their legs.²

Colostomates with thicker output also experience blockage in the pouch along with malodor. The fecal matter sticks to the inner walls of the pouch and does not advance. This is a condition commonly referred to as "pancaking". While

there are several commercial pouch additives to reduce odor, there are no commercial products manufactured specifically to address the latter. Often people with ostomies are advised to slide their fingers around the pouch to facilitate the emptying process. In reviewing the U.S. UOA (United Ostomy Association) web sites, one comes across several home remedies used by people with ostomies to address the pouch emptying issue. Some may use a turkey baster to flush the pouch, others



advise detaching and rinsing off the pouch (with two-piece systems), and some advise the use of vegetable, olive or mineral oil, or spray cooking oil, such as PAM, onto the inner walls of the pouch. All these procedures are cumbersome, messy and prone to accidents. The oil can be absorbed by the polymer material and can weaken the heat seals at the edge of the pouch.

While there is published literature that suggests modifying the pouch film surface to increase its lubricity to help the emptying process^{3, 4, 5} and making pouches with odor controlling agent deposits,^{6, 7} no commercial product that both lubricates and deodorizes the pouch at the same time existed until now. In this paper, the development of the first lubricating deodorant that addresses both the odor and lubrication issues in pouches⁸ is reported along with a user survey analysis.⁹

Adapt Lubricating Deodorant is commercialized in packets (single use packets, in a box of 50 units) and in 8 Fl. Oz. (236 ml) bottles for multiple use. Users are advised to use approximately 5 ml (1 tsp.) from the bottle or the contents of the entire packet and follow the Instructions for Use found in the Adapt Lubricating Deodorant packaging.

After adding Adapt Lubricating Deodorant to the pouch, the users are advised to gently massage the pouch between the palms of their hands to facilitate even coating of the pouch's inner walls of the appliances. The user is advised to add Adapt Lubricating Deodorant to the fresh pouch prior to applying and replenish with fresh lubricating deodorant after each pouch emptying.

Formulation and Laboratory Testing

Adapt Lubricating Deodorant consists of Purified Water, Hydroxyethyl cellulose, N-Ethyl-N-Soya Morpholinium Ethosulfate, Polaxamer 188 NF, Octoxynol-9, Propylene Glycol, Phenoxyethanol, Methylparaben, Ethylparaben, Propylparaben, Butylparaben, Istobutylparaben and Sodium Hydroxide.

Observations

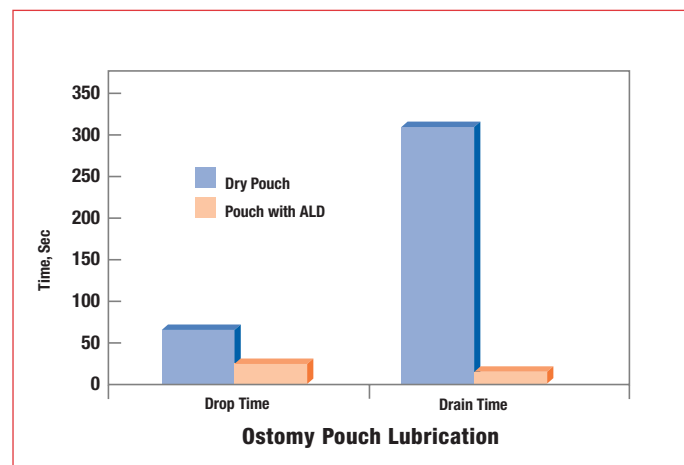


Figure 1 Ostomy Pouch Lubrication

Adapt Lubricating Deodorant provides excellent lubrication to the walls of the ostomy pouching system as demonstrated using simulated feces (Figure 1). Simulated feces is loaded into the pouch through the barrier hole; the time elapsed to reach the bottom of the pouch is measured as Drop Time. The bottom clamp of the drainable pouch is then opened; the time to empty without manual push is measured as Drain Time.

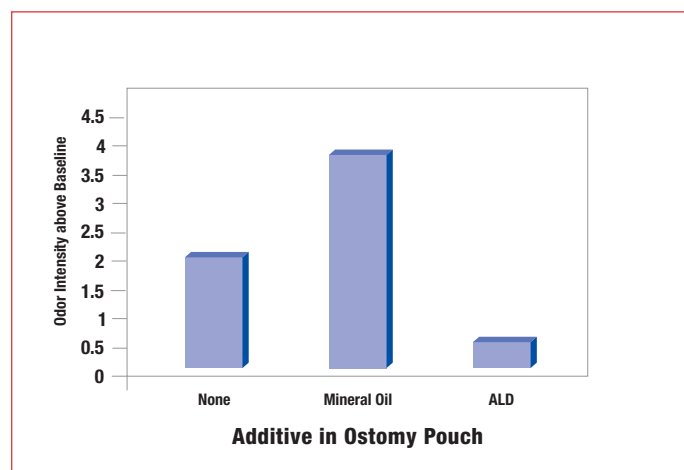


Figure 2 Adapt Lubricating Deodorant Neutralizes Odor

Adapt Lubricating Deodorant neutralizes sulfur odor efficiently. Pouches with mineral oil additive transmit more odor. This may be due to the increase in surface area for odor-causing molecules in the presence of mineral oil.

Conclusion

In conclusion, Adapt Lubricating Deodorant successfully addresses multiple problems of people with ostomies and provides superior performance to previously available materials in a single convenient product.

Product provides a unique combination of benefits that were perceived to:

- make pouch emptying easier
- reduce pancaking
- reduce odor better than current products
- be easy to apply into the pouch
- won't degrade pouch seals



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