**A New Approach in Drug Delivery: LUDIFLASH**

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**ABSTRACT**

Customers need a wonderful tasting and effective tablet that can be taken anyplace, whenever without the need of water. They need such a tablet that totally deteriorates inside minutes, with no harshness or white trailing sensation. FDTs quick crumbling tablets are the measurement structure which will deteriorate in mouth inside the space of seconds without need of water. This kind of property in dose structure can be accomplished by expansion of various assortments of excipients. In any case, the quantity of fillers/covers/disintegrant which can be utilized for FDT details is restricted in light of the fact that these mass excipients need to satisfy extraordinary necessities, for example, being dissolvable in water, charming taste, mouth feel, pleasantness and quick dispersibility. With Ludiflash, that is precisely exact thing they get. This is one of the novel excipient for quick dissolving drug conveyance which disintegrant quickly inside the space of seconds with delicate, rich consistency. It is extraordinarily intended for direct pressure on standard rapid tablet machine for hard tablet with extremely low friability. Ludiflash have great stream capacity, less water ingestion and no isolation of the dynamic fixings. Therefore, it very well may be handily handled. Ludiflash diminishes costs since it goes about as Across the board framework (filler, cover and disintegrant), Lower stockpiling costs (one material, not three), Lower investigation costs, Quicker item improvement, quicker process approval. It go about as persistent agreeable in light of the fact that it breaks down in the mouth inside the space of seconds with velvety and smooth mouthfeel, Unbiased to somewhat sweet, wonderful taste, and appropriate for Drug medication and dietary enhancements.

**Key Words**: Ludiflash, Fast dissolving tablet, Novel excipient

**INTRODUCTION**

From many years, many advances have happened in assembling of oral dose structure, and orally crumbling tablets (ODTs) advances is one piece of it which entered in market in 1980, and the their developing interest have lead extension of various item pipeline quickly. New ODT advances address numerous drug and patient requirements, going fromenhanced life-cycle the executives to advantageous dosing for pediatric, geriatric, and mental patients with dysphagia It additionally lead to improvement of different excipients, having added usefulness excipients (AFEs). Such excipients have ended up being vital in choosing security, effectivity as well as bioavailability and bioequivalence of dynamic medication.

.Ludiflash has across the board arrangement, it behave like diluent, fastener (by expanding the union with drug) as well as deteriorating specialists. It give hardness, yet in addition grants velvety taste and diminishes stockpiling and logical expenses and speed up item advancement (precisely stable tablets in push-through rankles), process approval and strength underway. Ludiflash is a direct compressible excipient for quick breaking down strong oral measurements structures. The plan of co-handled fixings comprises of three compendia fixings: A sugar-liquor, crospovidone and a polymer scattering in light of polyvinyl acetic acid derivation. It is custom-made to deteriorate promptly on the tongue with a lovely rich mouthfeel without a powdery or sandy sensation.

**COMMON EXCIPIENTS USED IN LUDIFLASH**

1. **90-95% Mannitol:** Fast-dissolving filler with a mildly sweet taste.
2. **5% Kollidon® CL-SF (Crospovidone):** A superior tablet disintegrant: Highly effective, disintegrates the tablet in the presence of very little liquid which offers a pleasantly smooth and creamy mouthfeel.
3. **5% Kollicoat® SR (Polyvinyl Acetate):** Hydrophobic binder to enhance disintegration.

**EXCEPTIONAL PROPERTIES OF LUDIFLASH**

* Carefully controlled particle size distribution, particle structure and high bulk density combine to provide good flowability.
* A standard tableting process yields excellent content uniformity, even at high tableting speeds.
* Compact, but highly porous and fast-disintegrating tablets offer exceptional hardness and low friability.
* Tablets can be manufactured, handled and packed using standard equipment.
* Low hygroscopicity when stored as a pure powder or in finished formulations, ensures the stability of the active ingredients and of the tablet itself.



Figure 1: Characteristics of ludiflash

**ADVANTAGES**

* Ludiflash saves time and money
* Ludiflash is reasonable for direct pressure and roller compaction.
* It can likewise be utilized in wet-granulation processes, where expected by the dynamic fixing, or for different reasons.
* The mixes can be handled on standard tableting machines, or utilized as granules or powder.
* Ludiflash offers great flowability, negligible water ingestion, astoundingly high attachment, and no isolation of the dynamic fixings. Subsequently, it tends to be handily handled.
* With Ludiflash you can fabricate tablets in great for minimal price and with brief time frame to-creation
* Tableting should be basic and ought to be conceivable with any traditional hardware and with any favored bundling type.
* Ludiflash offers you permit free assembling for complete business autonomy.
* It additionally offers you excellent adaptability as an excipient.
* Ludiflash is very flexible, and is viable with all traditional creation gear.
* It likewise gives you solidness and hardness when and where you really want it - for instance, for tablets to be packaged in PE-containers or push-through blisters



Figure 2: Advantages and disadvantages of ludiflash

**Promising active ingredients to be incorporate in Ludiflash**

Aminophyllin, Benoxinate (Oxybuprocaine) HCl, Benzonatate, Bethanechol Chloride, Bupivacaine Base and HCl, Caffeine, Carticaine (Articaine) HCl, Cathin, Dexpanthenol, Diprophyllin, Dobutamine, Dopamine, Ephedrine, Ibuprofen, Isotretinoin, Methylphenidate HCl, Oxybutynin Base and HCl, Oxymetazoline, Pseudoephedrine, PVP-Iodine, Ribavirin, Tetracaine Base and HCl, Theophylline, Tretinoin, Tricaine Methanesulfonate, Selegiline, Vitamins, Xylometazoline.

**CONCLUSION**

Ludiflash is a unique innovative co-processed blend of mannitol (95%), crospovidone (5%) and polyvinyl acetate (5%) intended to be preferable over anything in the market has seen to work date that gives extraordinary properties all through the whole tablet life cycle: with regards to plan, producing, bundling, ingestion and obviously in real life. Consequently it gives an exceptionally cost proficient creation pathway alongside persistent cordial properties.

REFERENCES

1. Sunita A. Chaudhary et al. ( 2010). Int. J. Res. Pharm. Sci. Vol-1, 103-107.
2. www.aapspharmaceutica.com/publications/newsmagazine/2007/oct07/10.pd
3. https://pharmaceutical.basf.com/en/Drug-Formulation/Ludiflash.html
4. Aksu et al. (2014) Trop J Pharm Res, September 13(9): 1374-1383
5. Aleksandra A. Katarzyna (August 2012)W. African Journal of Pharmacy and Pharmacology, Vol. 6(31): 2-2367, 22
6. Prashant N. Sheeja K. (April 2014) International Journal of Pharma Research & Review, 3(4):95
7. Hirani et al. (2009) Tropical Journal of Pharmaceutical Research, 8 (2): 161-172
8. Hyamala B, Narmada GY (2002)The Indian Pharmacist, 13(8): 09-12.
9. Valleri M, Mura P et al,( 2004) Drug Dev Ind Pharm, 30(5): 525-34.
10. Hanawa T et al.(1995) Chem Pharm Bull, 43(2): 284-288.
11. Mallet L. (1996) Caring for the Elderly Patient. J. Am.Pharm. Assoc. 36(11): 628-635.
12. Porter SC. (2001) Am Pharm Rev. 85: 28-35.
13. Sreenivas SA et al.(2005) Indian J Pharm Educ Res., 39(4): 177-181.
14. Seager H.( 1998) Drug-delivery products and Zydis Fast-dissolving dosage form. J Pharm Pharmacol, 50: 375-382.