



P. J. HEALTHCARE

Direct Compression

INNOKOAT EFFER-S

(Surface Modified Sodium Bicarbonate)

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Information Sheet:

• **INNOKOAT Effer-S** is a mixture of surface modified Sodium Carbonate and Sodium Bicarbonate powder developed for use in Pharmaceutical and Nutraceutical applications.

Advantages:

- Effervescent delivery systems can provide a number of advantages, including possible improved bioavailability and faster onset of therapeutic action.
- Local GMP Good Manufacturing Practice Certifications
- Conformity to innovators Product Profile
- In-house Product Specifications, test method & document support
- Efficient delivery time
- Availability: In Granules / Powder
- Packing in HDPE container

Sr. No.	TEST	SPECIFICATION
1.	Appearance	White to off white Granular powder.
2.	pH	6.0 to 11.0
3.	Bulk Density	0.5 to 1.0 g/ml
4.	Tap Density	0.7 to 1.2 g/ml
5.	Heavy Metal	NMT : 10.0 ppm
6.	Sieve Analysis	Retained on 60# (NMT: 5%) Retained on 100# (NMT: 60%)

Products Categories & Application:

- Convenient dosage forms are fast dissolving, highly soluble, and stable. Example, effervescent tablets provide the ease of carrying a tablet while at the same time giving the bioavailability of ingesting a solution. It uses for Pharmaceutical products such as antacids, analgesic, or cough/cold formulations and Nutraceutical products such as multi-vitamin and calcium supplement formulations.
- Sodium bicarbonate is a primary ingredient in effervescent tablets and powders. Together with an acid, such as citric acid or tartaric acid, sodium bicarbonate reacts in the presence of water to produce carbon dioxide (CO₂). Consequently, the major disadvantage of sodium bicarbonate is that, in the presence of minute amounts of moisture and acid, it immediately effervesces.
- **INNOKOAT Effer-S** effectively protects against premature effervescence by reducing the moisture sensitivity of the formulation. This is accomplished by modifying the surface of the sodium bicarbonate with a layer of sodium carbonate that surrounds the sodium bicarbonate core.
- This layer acts to protect the faster reducing sodium bicarbonate core by absorbing small amounts of moisture and thus reducing the possibility of premature effervescence in formulations. However, in the presence of large amounts of water, Effer-Soda readily dissolves and provides rapid effervescence.
- **INNOKOAT Effer-S** is having excellent flow compared to sodium bicarbonate & ideal for direct compression and sachet formulation. It has better compaction, allowing for less binder, resulting in an exceptional effervescent tablet.

Additional Application:

- Beside uses in effervescent tablets and sachets, **INNOKOAT Effer-S** can provide effervescence within chewable or fast disintegrating system to improve organoleptic and taste profile.

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