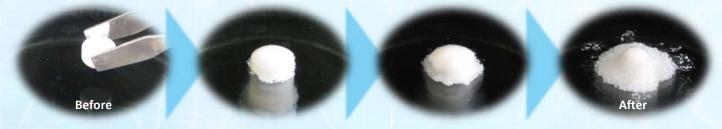
Co-Processed Excipient for Orally Disintegrating Tablets

HISORAD HSR-D03

Product Features

- HiSORAD is a state-of-the-art co-processed excipient for orally disintegrating tablets designed to have well-balanced property between oral disintegration time and tablet hardness.
- Composed of three compendial grade excipients, D-Mannitol, MCC and Croscarmellose sodium.

Tablet containing HiSORAD disintegrates rapidly when contacting with water.

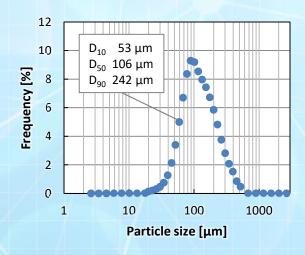


Characteristics

- **Excellent compactibility**
- Well-balanced tablet property between OD time and hardness
- High API loading capacity
- Simple composition

Powder Properties

Item	Typical Value	
Mean Particle Size*1	106 μm	
Density*2	Loose Tapped	0.35 g/cm ³ 0.49 g/cm ³
Angle of Repose*2		41°
Orifice Diameter*3	6.3 mm	
Water Content	2.4 wt%	



Measurement methods

- *1 Dry laser diffraction/light scattering instrument
- *2 Powder tester
- *3 Orifice diameter measurement instrument







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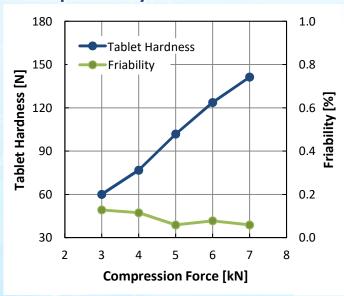
https://daicel-excipients.com/ daicel-excipients@jp.daicel.com



Tablet Properties (Placebo)

- High tablet hardness possible even at relatively low compression forces
- Placebo tablet with HiSORAD draws water rapidly and disintegrates within 20 seconds.

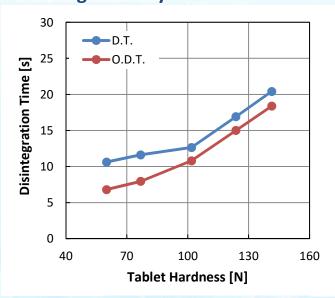
Compactibility



: HSR-D03 (99.5%) + Ca Stearate (0.5%) Composition **Tableting Condition** : Rotary-press, 20 rpm, Open-Feeder Hardness : Measured by electronic hardness tester (Ave. of n = 10)

Friability : Measured by JP general test method

Disintegratability



Tablet Shape Disintegration Time

(D.T.) (Ave. of n = 6)

Oral Disintegration Time : Measured by Tricorptester (Ave. of n=6) (O.D.T) (Okada Seiko Co., Ltd. Tokyo, Japan)

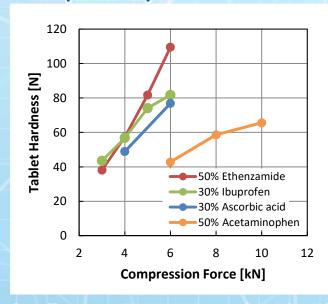
: 200 mg, ϕ 8 mm, Flat-bevelled edge

: Measured by JP general test method

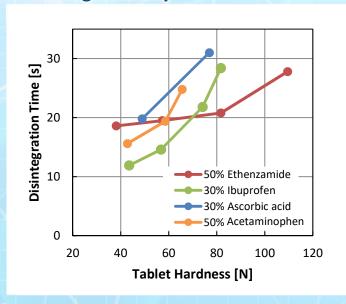
Tablet Properties (Containing API)

- HiSORAD enables rapid disintegration and sufficient tablet hardness even when API is loaded at relatively high amount.
- Tableting of poorly compressible APIs may be possible due to its excellent compactibility.

Compactibility



Disintegratability



: HSR-D03 + API + Mg Stearate (0.5 -1.5%) + LASA (1.0 -1.2%) Composition

Tablet Shape : 250 mg, ϕ 8 mm, Flat-bevelled edge

Tableting Condition : Rotary-press, 20 rpm

Hardness Measured by electronic hardness tester (Ave. of n = 10)

Disintegration Time : Measured by JP general test method

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