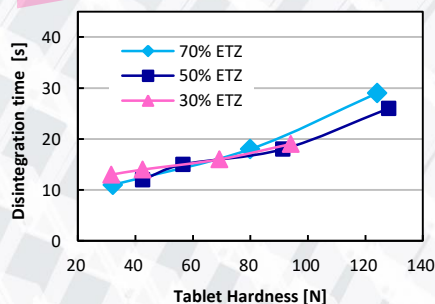


## High Content API

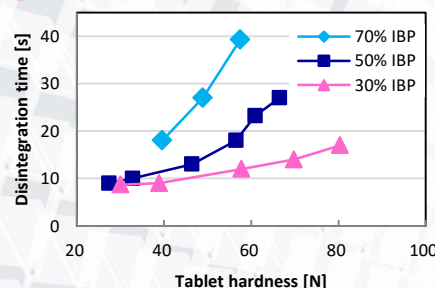
GRANFILLER-D shows good compactibility and disintegration in ODTs even with high content API.

### 1. Ethenzamide (ETZ) ODT



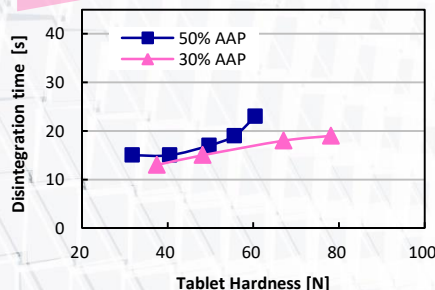
API	Ethenzamide					
API Content [%]	0	30	50	70	70	70
Compression Force [kN]	6	7	9	5	7	5
Tablet Hardness [N]	80	69	94	57	91	80
Disintegration Time [s]	15	16	19	15	18	18
Oral Disintegration Time (in vitro) [s]	16	16	21	16	25	-
Friability [%]	0.12	0.18	0.13	0.31	0.15	0.30

### 2. Ibuprofen (IBP) ODT



API	Ibuprofen					
API Content [%]	0	30	50	70	70	70
Compression Force [kN]	6	7	9	7	9	7
Tablet Hardness [N]	80	58	70	46	57	49
Disintegration Time [s]	15	12	14	13	18	27
Oral Disintegration Time (in vitro) [s]	16	13	17	19	27	43
Friability [%]	0.12	0.09	0.07	0.16	0.12	0.15

### 3. Acetaminophen (AAP) ODT



API	Acetaminophen					
API Content [%]	0	30	50	50	50	50
Compression Force [kN]	6	7	9	11	11	13
Tablet Hardness [N]	80	48	67	78	56	61
Disintegration Time [s]	15	15	18	19	19	23
Oral Disintegration Time (in vitro) [s]	16	15	18	22	26	32
Friability [%]	0.12	0.18	0.14	0.09	0.44	0.30

Composition: API + GNF-D211 + Mg-St (0.5-1.5%) + Silica, Colloidal Hydrated (1.0%)  
 Tableting Condition: Rotary-press (20 rpm), 250 mg, φ8 mm, Flat bevelled-edge shape

## Coated Pellet

GRANFILLER-D can be applied to ODTs with coated Pellet.

### 1. Coated pellet for bitter taste masking

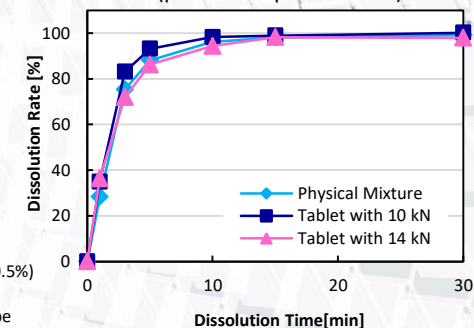
**Ingredients of Coated Pellet**  
 API: Acetaminophen (19.4%)  
 Core particle: Celphere  
 Coating: EUDRAGIT RL30D

#### ODT containing coated pellet (27.3%)

Compression Force [kN]	10	14
Tablet Hardness [N]	95	112
Disintegration Time [s]	17	23

Composition: GNF-D211 (72.2%) + Coated pellet (27.3%) + Mg-St (0.5%)  
 Tableting Condition: Hand-press, 300 mg, φ8 mm, Flat bevelled-edge shape

**Dissolution Profile**  
(pH6.8 Phosphate buffer)



### 2. Enteric coated pellet

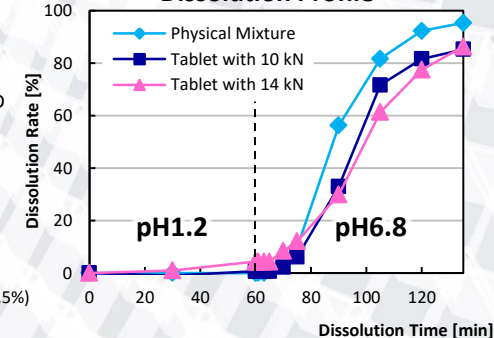
**Ingredients of Coated pellet**  
 API: Acetaminophen (13.3%)  
 Core Particle: Celphere  
 Coating: EUDRAGIT L30D-55 + NE30D

#### ODT containing coated pellet (40.0%)

Compression Force [kN]	10	14
Tablet Hardness [N]	34	36
Disintegration Time [s]	13	14

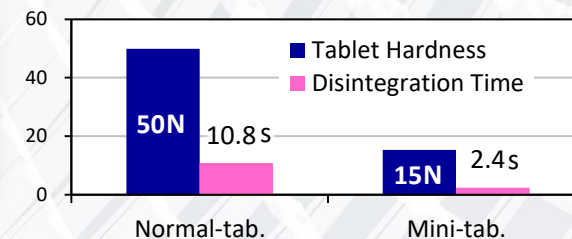
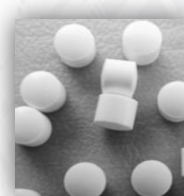
Composition: GNF-D211 (59.5%) + Coated pellet (40.0%) + Mg-St (0.5%)  
 Tableting Condition: Hand-press, 300 mg, φ8 mm, Flat bevelled-edge shape

**Dissolution Profile**



## Mini-Tablet

GRANFILLER-D can be applied to OD mini-tablet.



Composition: Acetaminophen coated pellet (9.8%) + GNF-D211 (88.2%) + SSF (2%)  
 Tableting Condition: <Normal Tab.> 180mg, φ8 mm, 8.3kN <Mini-Tab.> 15mg, φ 2.5mm, 3.7kN