

## #20 Sour dubble IPA

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **67**
- SRM **4.8**
- Style **Imperial IPA**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **12 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	2 kg (50%)	80 %	4
Grain	Płatki pszeniczne	1 kg (25%)	85 %	3
Grain	Płatki owsiane	1 kg (25%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %
Boil	Cascade	40 g	15 min	6 %
Whirlpool	Centennial	40 g	0 min	10.5 %
Whirlpool	Citra	40 g	0 min	12 %
Dry Hop	Cascade	60 g	2 day(s)	6 %
Dry Hop	Centennial	60 g	2 day(s)	10.5 %
Dry Hop	Citra	60 g	2 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	40 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Spice	Sok pomarańczowy	500 g	Secondary	7 day(s)
Spice	Sok ananasowy	500 g	Secondary	7 day(s)

### Notes

- Brzeczka zakwaszona bakteriami kwasu mlekowego.  
*Aug 30, 2018, 9:37 PM*