

## Freeste disco

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **43**
- SRM **5.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **24.7 liter(s)**
- Total mash volume **31.2 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszoniczny	2 kg (26.5%)	85 %	4
Grain	Płatki owsiane	0.3 kg (4%)	85 %	3
Grain	Weyermann - Carapils	0.2 kg (2.6%)	78 %	4
Grain	Abbey Castle	0.3 kg (4%)	80 %	45
Grain	Strzegom Pilzneński	2.2 kg (29.1%)	80 %	4
Grain	Płatki pszeniczne	0.5 kg (6.6%)	85 %	3
Grain	Strzegom Wiedeński	1 kg (13.2%)	79 %	10
Liquid Extract	WES ekstrakt słodowy jasny	0.3 kg (4%)	80 %	---
Sugar	Milk Sugar (Lactose)	0.75 kg (9.9%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Cascade	68 g	15 min	6 %
Whirlpool	Sabro	50 g	30 min	15 %
Whirlpool	Citra	20 g	30 min	12.5 %
Dry Hop	Citra	80 g	4 day(s)	12.5 %
Dry Hop	Sabro	50 g	4 day(s)	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
London fog	Ale	Slant	200 ml	Yeast Bay

### Extras

Type	Name	Amount	Use for	Time
Water Agent	NaCl	7.5 g	Mash	---

## Notes

- Zakwaszanie I. Plantarum 48 h  
*Nov 3, 2019, 3:11 AM*