

## Twin-Pod

- Gravity **14.7 BLG**
- ABV ---
- IBU **34**
- SRM **8.2**
- Style **Other Smoked Beer**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **19 %/h**
- Boil size **15.1 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

- Temp **46 C**, Time **10 min**
- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

### Mash step by step

- Heat up **9 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **40 min** at **68C**
- Keep mash **40 min** at **72C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt wędzony brzozą	2 kg (66.7%)	80 %	5
Grain	Żytni	0.7 kg (23.3%)	85 %	8
Grain	Abbey Castle	0.15 kg (5%)	80 %	45
Grain	Karmel 30 (Viking Malt)	0.15 kg (5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	8.8 %
Aroma (end of boil)	Cascade PL	15 g	15 min	4.4 %
Whirlpool	Cascade PL	15 g	0 min	4.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis