

hazy

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **82**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **28.4 liter(s)**
- Total mash volume **37 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **28.4 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	2.2 kg (25.6%)	81 %	5
Grain	Weyermann pszeniczny jasny	2.5 kg (29.1%)	80 %	6
Grain	Słód owsiany Fawcett	1 kg (11.6%)	61 %	5
Grain	Żytni	0.3 kg (3.5%)	85 %	8
Grain	Weyermann - Carapils	0.6 kg (7%)	78 %	4
Grain	Płatki pszeniczne	1 kg (11.6%)	60 %	3
Grain	Płatki owsiane	1 kg (11.6%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Boil	Strata	7 g	30 min	14 %
Boil	Talus	7 g	30 min	7.4 %
Boil	Strata	20 g	5 min	14 %
Boil	Talus	20 g	5 min	7.4 %

Aroma (end of boil)	Strata	40 g	15 min	14 %
Aroma (end of boil)	Talus	40 g	15 min	7.4 %
Whirlpool	Strata	50 g	20 min	14 %
Whirlpool	Talus	50 g	20 min	7.4 %
Dry Hop	Strata	23 g	5 day(s)	14 %
Dry Hop	Talus	23 g	5 day(s)	7.4 %
Dry Hop	Strata	60 g	5 day(s)	14 %
Dry Hop	Talus	60 g	5 day(s)	7.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew American East Coast - New England	Ale	Slant	100 ml	Lallemand