

## NE PA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **46**
- SRM **3.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

### Steps

- Temp **66 C**, Time **55 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **55 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.3 kg (76.8%)	81 %	4
Grain	Płatki owsiane	1 kg (17.9%)	85 %	3
Grain	Płatki pszeniczne	0.3 kg (5.4%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	50 min	13.2 %
Boil	Amarillo	10 g	50 min	9.5 %
Boil	Simcoe	10 g	15 min	13.2 %
Boil	Amarillo	10 g	15 min	9.5 %
Aroma (end of boil)	Simcoe	10 g	0 min	13.2 %
Aroma (end of boil)	Amarillo	10 g	0 min	9.5 %
Whirlpool	Simcoe	20 g	15 min	13.2 %
Whirlpool	Amarillo	20 g	15 min	9.5 %
Dry Hop	Simcoe	50 g	3 day(s)	13.2 %
Dry Hop	Amarillo	25 g	3 day(s)	9.5 %
Dry Hop	Simcoe	50 g	2 day(s)	13.2 %

Dry Hop	Amarillo	25 g	2 day(s)	9.5 %
Dry Hop	El Dorado	50 g	2 day(s)	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wlp066	Ale	Slant	200 ml	---