

## 19 dawid

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **44**
- SRM **5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **20.5 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **5.4 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **27.5 liter(s)**

### Steps

- Temp **70 C**, Time **80 min**

### Mash step by step

- Heat up **23.2 liter(s)** of strike water to **74.6C**
- Add grains
- Keep mash **80 min** at **70C**
- Sparge using **1.6 liter(s)** of **76C** water or to achieve **20.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	2.5 kg (58.1%)	80 %	8
Grain	Strzegom Pilzneński	1.3 kg (30.2%)	80 %	4
Grain	Słód pszeniczny Bestmalz	0.5 kg (11.6%)	82 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	35 min	13 %
Boil	mech irlandzki	1 g	10 min	1 %
Boil	Simcoe	50 g	5 min	13.2 %
Boil	Cascade	50 g	5 min	6 %
Whirlpool	Centennial	40 g	1 min	10.5 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %
Dry Hop	Citra	30 g	5 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10.5 g	---