

## 13

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **47**
- SRM **6.3**
- 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 **50 min**
- Evaporation rate **10 %/h**
- Boil size **24.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

### Steps

- Temp **69 C**, Time **50 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **69C**
- Keep mash **1 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (74.1%)	80 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (9.3%)	79 %	16
Grain	Strzegom Pszeniczny	0.5 kg (9.3%)	81 %	6
Grain	Oats, Flaked	0.2 kg (3.7%)	80 %	2
Grain	Cara Gold Castlemalting	0.2 kg (3.7%)	78 %	120

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Chinook	10 g	30 min	13 %
Boil	Amarillo	25 g	10 min	9.5 %
Boil	Palisade	25 g	5 min	7.5 %
Boil	Citra	25 g	2 min	12 %
Boil	Mosaic	25 g	2 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - American Ale	Ale	Liquid	125 ml	Wyeast Labs
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