

## #2 Sierra Nevada Pale Ale

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **47**
- SRM **9.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **19.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (90.9%)	80 %	4
Grain	Strzegom Karmel 150	0.5 kg (9.1%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	60 min	7.1 %
Boil	Cascade	28 g	20 min	7.1 %
Aroma (end of boil)	Cascade	45 g	10 min	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	5 g	Mangrove Jack's