

## #01 Dark Maiden

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- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **60**
- SRM **30.1**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **27.7 liter(s)**

### Steps

- Temp **66 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **79 C**, Time **5 min**

### Mash step by step

- Heat up **21.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **70C**
- Keep mash **5 min** at **79C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (81.2%)	80 %	5
Grain	Strzegom Karmel 150	0.2 kg (3.2%)	75 %	150
Grain	Strzegom Czekoladowy 400	0.2 kg (3.2%)	68 %	400
Grain	Jęczmień palony	0.36 kg (5.8%)	55 %	985
Grain	Płatki owsiane	0.4 kg (6.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Mosaic	10 g	5 min	10 %
Boil	Citra	20 g	5 min	12 %
Dry Hop	Mosaic	20 g	5 day(s)	10 %
Dry Hop	Citra	10 g	5 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	10 g	Safale
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