

American Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **57**
- SRM **35**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.2 liter(s)**
- Total mash volume **37.6 liter(s)**

Steps

- Temp **52 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **28.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **0 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **38.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (53.2%)	80 %	5
Grain	Karmelowy Czerwony	1 kg (10.6%)	75 %	59
Grain	Viking Vienna Malt	2 kg (21.3%)	79 %	7
Grain	Jęczmień palony	0.4 kg (4.3%)	55 %	985
Grain	Strzegom Czekoladowy 1200	0.5 kg (5.3%)	68 %	1202
Grain	Płatki owsiane	0.5 kg (5.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Columbus/Tomahawk/Zeus	50 g	20 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	25 g	5 min	15.5 %
Aroma (end of boil)	Cascade PL	50 g	5 min	5.2 %
Dry Hop	Columbus/Tomahawk/Zeus	50 g	3 day(s)	15.5 %
Dry Hop	Cascade PL	50 g	3 day(s)	5.2 %