

American Stout I

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **36.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **32.6 liter(s)**
- Total mash volume **41.9 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **32.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **60 min** at **72C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (53.8%)	80 %	4
Grain	Strzegom Monachijski typ I	1.5 kg (16.1%)	79 %	16
Grain	Karmelowy żytni Strzegom	0.2 kg (2.2%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.2%)	68 %	400
Grain	Simpsons - Coffee Malt	0.2 kg (2.2%)	74 %	296
Grain	Płatki owsiane	0.4 kg (4.3%)	60 %	3
Grain	Jęczmień niesłodowany	1 kg (10.8%)	75 %	2
Grain	Jęczmień palony	0.4 kg (4.3%)	55 %	985
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (4.3%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	9.1 %
Boil	Amarillo	12 g	20 min	8.7 %

Boil	Simcoe	12 g	20 min	12.6 %
Boil	Amarillo	12 g	15 min	9.5 %
Boil	Simcoe	12 g	15 min	13.2 %
Aroma (end of boil)	Amarillo	13 g	5 min	8.7 %
Aroma (end of boil)	Simcoe	13 g	5 min	12.6 %
Aroma (end of boil)	Amarillo	13 g	1 min	9.5 %
Aroma (end of boil)	Simcoe	13 g	1 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar