

American Stout #19

- Gravity **16.9 BLG**
- ABV ---
- IBU **61**
- SRM **38.7**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (90.9%)	81 %	4
Grain	Strzegom Czekoladowy jasny	0.1 kg (1.5%)	68 %	400
Grain	Strzegom Karmel 300	0.2 kg (3%)	70 %	299
Grain	Jęczmień palony	0.3 kg (4.5%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Centennial	30 g	10 min	10.5 %
Boil	Centennial	30 g	30 min	10.5 %
Boil	Magnum	20 g	60 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile