

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 | Pilznieński | 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 |