

american stout

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **28**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **3 %**
- Size with trub loss **62.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **71.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36.4 liter(s)**
- Total mash volume **48.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**
- Temp **50 C**, Time **0 min**

Mash step by step

- Heat up **36.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **0 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **47.6 liter(s)** of **76C** water or to achieve **71.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pilsner malt | 4.2 kg (33.8%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ II | 3 kg (24.1%) | 79 % | 22 |
| Grain | castle malt wheat blanc nature | 1 kg (8%) | 83 % | 5 |
| Grain | Karmelowy Czerwony | 1.6 kg (12.9%) | 75 % | 59 |
| Grain | Płatki owsiane | 1.1 kg (8.8%) | 85 % | 3 |
| Grain | Jęczmień palony | 0.75 kg (6%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.47 kg (3.8%) | 68 % | 1200 |
| Sugar | cukier refermentacja | 0.32 kg (2.6%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Marynka | 70 g | 60 min | 9.5 % |
| Boil | Nugget | 50 g | 10 min | 15 % |
| Dry Hop | Nugget | 120 g | 5 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| safale s-05 | Ale | Slant | 290 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------------------------|--------|-----------|----------|
| Flavor | wiórki kokosowe na 20l cicha | 200 g | Secondary | 4 day(s) |
| Flavor | kawa cicha kolejne 20l | 10 g | Secondary | 4 day(s) |
| Flavor | nugget 20 l cichej | 120 g | Secondary | 4 day(s) |