

American stout

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **47**
- SRM **31.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **25.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (34.9%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 2 kg (23.3%) | 80 % | 4 |
| Grain | Carared | 0.5 kg (5.8%) | 75 % | 39 |
| Grain | Melanoiden Malt | 0.5 kg (5.8%) | 80 % | 39 |
| Grain | Pszeniczny | 1 kg (11.6%) | 85 % | 20 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.3%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.4 kg (4.7%) | 55 % | 985 |
| Grain | Carabohemian | 0.2 kg (2.3%) | 70 % | 200 |
| Grain | Płatki owsiane | 0.8 kg (9.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Citra | 20 g | 60 min | 12 % |
| Boil | Citra | 30 g | 15 min | 12 % |
| Boil | Amarillo | 15 g | 15 min | 9.5 % |
| Boil | Mosaic | 15 g | 15 min | 10 % |

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|-----------|----------|------|----------|-------|
| Whirlpool | Amarillo | 15 g | 0 min | 9.5 % |
| Whirlpool | Mosaic | 15 g | 0 min | 10 % |
| Dry Hop | Mosaic | 30 g | 5 day(s) | 10 % |
| Dry Hop | Amarillo | 30 g | 5 day(s) | 9.5 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | Gips | 5 g | Mash | 60 min |
| Fining | Mech irlandzki | 5 g | Boil | 15 min |