

AMERICAN STOUT 16 BLG # 90

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **66**
- SRM **37.3**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (71.4%) | 80 % | 5 |
| Grain | Viking Barwiący Obtuszczoney | 0.3 kg (4.3%) | 65 % | 1200 |
| Grain | Strzegom Karmel 150 | 0.4 kg (5.7%) | 75 % | 150 |
| Grain | Weyermann - Carafa I | 0.2 kg (2.9%) | 70 % | 690 |
| Grain | Słód owsiany | 1 kg (14.3%) | 61 % | 5 |
| Grain | Black Barley (Roast Barley) | 0.1 kg (1.4%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Chinook | 20 g | 45 min | 8 % |
| Boil | Chinook | 30 g | 60 min | 8 % |
| Boil | Citra | 20 g | 30 min | 14 % |
| Aroma (end of boil) | Citra | 50 g | 0 min | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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|--------------|-----|-------|--------|-----|
| Safale US-05 | Ale | Slant | 400 ml | --- |
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