

amerykan staff

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **71**
- SRM **47**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **29.7 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **23.1 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.6 kg (69.7%) | 80 % | 4 |
| Grain | Strzegom Karmel 600 | 0.5 kg (7.6%) | 68 % | 600 |
| Grain | Jęczmień palony | 0.6 kg (9.1%) | 55 % | 985 |
| Grain | kawowy 480-520 | 0.5 kg (7.6%) | --- % | 500 |
| Grain | Viking Pale Ale malt | 0.4 kg (6.1%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|----------|------------|
| Boil | Marynka | 50 g | 60 min | 8.5 % |
| Aroma (end of boil) | ekuanot | 25 g | 15 min | 12.8 % |
| Aroma (end of boil) | El Dorado | 25 g | 15 min | 12.9 % |
| Dry Hop | El Dorado | 25 g | 3 day(s) | 12.9 % |
| Dry Hop | ekuanot | 25 g | 3 day(s) | 12.8 % |

Yeasts

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

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|------------------------------|-----|-------|--------|-----|
| FM13 Irlandzkie Ciemności | Ale | Slant | 200 ml | --- |
|------------------------------|-----|-------|--------|-----|