

# 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                              |     |       |        |     |
|------------------------------|-----|-------|--------|-----|
| FM13 Irlandzkie<br>Ciemności | Ale | Slant | 200 ml | --- |
|------------------------------|-----|-------|--------|-----|