

wypadowe z resztek

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **44 liter(s)**
- Trub loss **5 %**
- Size with trub loss **46.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **55.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **42 liter(s)**
- Total mash volume **56 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **42 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **27.7 liter(s)** of **76C** water or to achieve **55.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Wheat Malt | 5 kg (35.7%) | 83 % | 5 |
| Grain | Viking Pale Ale malt | 5 kg (35.7%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 4 kg (28.6%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 60 g | 60 min | 4 % |
| Aroma (end of boil) | Cascade | 100 g | 10 min | 6 % |
| Aroma (end of boil) | Willamette | 30 g | 10 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | Fermentis |