

owskiapa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **44**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **9.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **13.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **72 C**, Time **20 min**
- Temp **48 C**, Time **30 min**
- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **30 min** at **48C**
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **13.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|------------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.145 kg (64.8%) | 80 % | 5 |
| Grain | Płatki owsiane | 1 kg (30.2%) | 60 % | 3 |
| Grain | Briess - Carapils Malt | 0.165 kg (5%) | 74 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Warrior | 30 g | 15 min | 14.2 % |
| Dry Hop | Comet | 30 g | --- | 8.3 % |
| Dry Hop | Zythos | 30 g | --- | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Notes

- 1. krok zacierania: kleikowanie owsa: 1kg płatków w 4 kg wody.

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

2. krok zacierania: skleikowany owies dodano do zimnej wody, dodano słydy i ustabilizowano temperaturę w 48 C- przerwa beta-glukanowa.
 3. krok zacierania- przerwa scukrzająca.
 4. Krok zacierania- raczej nie jest niezbędny
 5. krok zacierania- mash out.
- Mimo dużej ilości owsa nie było problemów z filtracją i wysładzaniem. Być może to zasługa przerwy beta-glukanowej?
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