

Amerykańska sosna v.2

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **40**
- SRM **4.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------------------|------------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.8 kg (32.3%) | 80 % | 4 |
| Grain | Słód PSZENICZNY Viking Malt | 2 kg (35.9%) | 82 % | 5 |
| Grain | Słód Cookie Viking Malt 1kg śrutowany | 0.1 kg (1.8%) | --- % | 40 |
| Adjunct | Płatki owsiane | 0.5 kg (9%) | 60 % | 3 |
| Grain | Słód Viking Pale Ale malt "0" | 0.717 kg (12.9%) | 79 % | 5 |
| Grain | Słód MONACHIJSKI typ I 16 EBC Crisp | 0.45 kg (8.1%) | 82 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Amarillo USA | 21 g | 60 min | 9.5 % |
| Boil | Chinok pl | 16 g | 60 min | 6.6 % |
| Aroma (end of boil) | Falconer's Flight USA | 30 g | 10 min | 10.5 % |

Yeasts

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

| | | | | |
|-------|-------|-----|------|-----|
| wb-06 | Wheat | Dry | 11 g | --- |
|-------|-------|-----|------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|---------|--------|
| Flavor | pȩdy sosnowe | 170 g | Boil | 10 min |