

Robin

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **34**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|--------------|--------|-----|
| Grain | Dust Malz Pale Ale | 3 kg (60%) | 79 % | 7 |
| Grain | BESTMALZ - Best Pilsen | 1 kg (20%) | 80.5 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (10%) | 79 % | 22 |
| Grain | Durst Malz Karmel 30 | 0.3 kg (6%) | 75 % | 30 |
| Grain | Płatki owsiane | 0.2 kg (4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|--------|------------|
| Boil | Eureka! | 10 g | 60 min | 18 % |
| Boil | Cascade | 5 g | 30 min | 6 % |
| Boil | Eureka! | 5 g | 30 min | 18 % |
| Boil | Cascade | 5 g | 5 min | 6 % |
| Boil | Lemon drop | 10 g | 5 min | 4.6 % |
| Boil | Eureka! | 5 g | 5 min | 18 % |
| Whirlpool | Eureka! | 10 g | 15 min | 18 % |

| | | | | |
|-----------|------------|------|----------|-------|
| Whirlpool | Lemon drop | 10 g | 15 min | 4.6 % |
| Whirlpool | Cascade | 10 g | 15 min | 6 % |
| Dry Hop | Lemon drop | 10 g | 2 day(s) | 4.6 % |
| Dry Hop | Eureka! | 10 g | 2 day(s) | 18 % |
| Dry Hop | Cascade | 10 g | 2 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|------|----------------|--------|-----------|----------|
| Herb | Pędy Świerkowe | 15 g | Secondary | 7 day(s) |
| Herb | Pędy Świerkowe | 10 g | Secondary | 2 day(s) |