

Apa z malinami

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **15**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **2 %**
- Size with trub loss **561 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **617.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **352.5 liter(s)**
- Total mash volume **470 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **78 C**, Time **10 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **352.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **382.9 liter(s)** of **76C** water or to achieve **617.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński | 40 kg (34%) | 80 % | 4 |
| Grain | Słód pszeniczny | 15 kg (12.8%) | 82 % | 5 |
| Grain | Monachijski | 12.5 kg (10.6%) | 80 % | 16 |
| Grain | Pale Malt (2 Row) Bel | 50 kg (42.6%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Premiant | 200 g | 60 min | 8 % |
| Boil | Premiant | 300 g | 30 min | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale | Dry | 500 g | Fermentis |