

AM

- Gravity **13.3 BLG**
- ABV ---
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | pilżeński | 4.5 kg (81.1%) | --- % | --- |
| Grain | przeniczny | 0.35 kg (6.3%) | --- % | --- |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.6%) | 75 % | 150 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (9%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil | Mosaic | 10 g | 60 min | 10 % |
| Boil | Mosaic | 10 g | 30 min | 10 % |
| Boil | Mosaic | 20 g | 15 min | 10 % |
| Whirlpool | Mosaic | 30 g | 0 min | 10 % |
| Dry Hop | Mosaic | 30 g | 5 day(s) | 10 % |

Yeasts

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