

Kwasik

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **13**
- SRM **2.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Strzegom Pilzneński | 0.9 kg (37.5%) | 80 % | 4 |
| Grain | Strzegom Pszeniczny | 0.75 kg (31.3%) | 81 % | 6 |
| Grain | Płatki owsiane | 0.45 kg (18.8%) | 85 % | 3 |
| Sugar | Milk Sugar (Lactose) | 0.3 kg (12.5%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Simcoe | 6 g | 50 min | 13.2 % |
| Dry Hop | Amarillo | 22.5 g | 3 day(s) | 9.5 % |
| Dry Hop | Galaxy | 15 g | 3 day(s) | 15 % |
| Dry Hop | Citra | 15 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------------|------|------|--------|------------|
| Mangrove Jack's M54 Californian Lager | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------------|--------|---------|--------|
| Other | Kwas mlekowy | 45 g | Boil | 50 min |

| | | | | |
|-------------|----------------------------|------|------|-------|
| Spice | Skórka słodkiej pomarańczy | 45 g | Boil | 0 min |
| Water Agent | Kwas mlekowy | 15 g | Mash | 0 min |