

WARKA #5

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **76**
- SRM **5.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **74 C**, Time **20 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **74C**
- Keep mash **0 min** at **78C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 1.7 kg (47.2%) | 80 % | 7 |
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 1.7 kg (47.2%) | 80 % | 7 |
| Grain | Płatki owsiane | 0.2 kg (5.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Lomik | 20 g | 60 min | 4.6 % |
| Boil | Sybilla | 20 g | 60 min | 6 % |
| Boil | Tradition | 20 g | 60 min | 5.2 % |
| Boil | Lomik | 20 g | 15 min | 4.6 % |
| Boil | Sybilla | 20 g | 15 min | 6 % |
| Boil | Tradition | 20 g | 15 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| wb | Wheat | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------------|--------|---------|-------|
| Flavor | skórka z pomarańczy | 12 g | Boil | 5 min |
| Spice | curacao | 12 g | Boil | 5 min |
| Spice | kmin rzymski | 1 g | Boil | 5 min |
| Spice | kolendra | 3 g | Boil | 5 min |