

English IPA v3 #56

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **52**
- SRM **7.3**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.28 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|-----------------|--------|-----|
| Grain | Bestmalz - pilzneński | 5 kg (82%) | 80.5 % | 4 |
| Grain | Bestmalz - Caramelpils | 0.1 kg (1.6%) | 75 % | 5 |
| Grain | Bestmalz - monachijski I | 0.75 kg (12.3%) | 80 % | 16 |
| Grain | Chateau - Crystal | 0.25 kg (4.1%) | 78 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|----------|------------|
| Boil | Warrior | 16 g | 60 min | 14.7 % |
| Aroma (end of boil) | Columbus | 31.3 g | 15 min | 12.5 % |
| Aroma (end of boil) | East Kent Goldings | 40 g | 10 min | 4.5 % |
| Aroma (end of boil) | Mandarina Bavaria | 40 g | 5 min | 7.6 % |
| Aroma (end of boil) | Fuggles | 50 g | 1 min | 4.5 % |
| Dry Hop | East Kent Goldings | 60 g | 4 day(s) | 4.5 % |
| Dry Hop | Mandarina Bavaria | 60 g | 4 day(s) | 7.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 210 ml | Fermentum Mobile |
| ponad miesięczna gęstwa | | | | |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------------------|--------|---------|-------|
| Water Agent | gips piwowarski | 5 g | Mash | --- |
| Water Agent | chlorek wapnia [ml] | 3.44 g | Mash | --- |
| Water Agent | kwask mlekowy 80% [ml] | 3.77 g | Mash | --- |
| Water Agent | sól epsom | 3 g | Mash | --- |
| Fining | mech irlandzki | 3 g | Boil | 5 min |