

## Made in Poland IPA 14 Blg

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **68**
- SRM **4.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.2 kg (86.6%) | 80 %  | 5   |
| Grain | Pszeniczny           | 0.4 kg (8.2%)  | 85 %  | 4   |
| Grain | Strzegom Karmel 30   | 0.25 kg (5.2%) | 75 %  | 30  |

### Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | lunga      | 25 g   | 60 min   | 11 %       |
| Boil                | Puławski   | 30 g   | 45 min   | 6.1 %      |
| Aroma (end of boil) | Cascade PL | 50 g   | 10 min   | 5.2 %      |
| Aroma (end of boil) | Oktawia    | 30 g   | 10 min   | 7.8 %      |
| Dry Hop             | Cascade PL | 50 g   | 6 day(s) | 5.2 %      |
| Dry Hop             | Chinook    | 30 g   | 6 day(s) | 10 %       |

### Yeasts

| Name                              | Type | Form | Amount | Laboratory      |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale  | Dry  | 10 g   | Mangrove Jack's |

### Notes

- Uwaga! przepis zmodyfikowany przez błąd w chmieleniu. W oryginale tylko lunga jest na goryczkę a Puławski powinien być gotowany 15 min  
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