

MADE IN POLAND IPA 14 BLG # 1

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **53**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20.9 liter(s)**

Steps

- Temp **60 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **66.1C**
- Add grains
- Keep mash **90 min** at **60C**
- Keep mash **5 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.5 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 | Karmelowy Jasny 30EBC | 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 | 15 min | 4.6 % |
| Boil | Oktawia | 30 g | 10 min | 7.1 % |
| Boil | Cascade | 50 g | 10 min | 5.2 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 6 % |
| Dry Hop | Chinook | 30 g | 7 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 11.5 g | Mangrove Jack's |