

MAC-11

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **43**
- SRM **3.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.4 kg (85.7%) | 80 % | 4 |
| Grain | Pszeniczny | 0.25 kg (8.9%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.11 kg (3.9%) | 60 % | 3 |
| Grain | Weyermann - Carapils | 0.04 kg (1.4%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | lunga | 30 g | 30 min | 10.3 % |
| Whirlpool | Cascade PL | 22 g | 0 min | 5.2 % |
| Whirlpool | Mosaic | 22 g | 0 min | 12.3 % |
| Whirlpool | Amarillo | 22 g | 0 min | 9.5 % |
| Dry Hop | Cascade PL | 28 g | 4 day(s) | 5.2 % |
| Dry Hop | Mosaic | 28 g | 4 day(s) | 12.3 % |
| Dry Hop | Amarillo | 28 g | 4 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |