

# BIEDANEIPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **36**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Fermentables

| Type  | Name                      | Amount        | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pilsner Malt  | 2 kg (38.5%)  | 81 %  | 5   |
| Grain | Weyermann - Pale Ale Malt | 2 kg (38.5%)  | 85 %  | 7   |
| Grain | Weyermann - Carapils      | 0.2 kg (3.8%) | 78 %  | 4   |
| Grain | Płatki pszeniczne         | 0.5 kg (9.6%) | 85 %  | 3   |
| Grain | Płatki owsiane            | 0.5 kg (9.6%) | 85 %  | 3   |

## Hops

| Use for   | Name                   | Amount | Time     | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 15 g   | 60 min   | 15.5 %     |
| Whirlpool | Citra                  | 30 g   | 5 min    | 12 %       |
| Whirlpool | Simcoe                 | 30 g   | 5 min    | 13.2 %     |
| Whirlpool | Amarillo               | 30 g   | 5 min    | 9.5 %      |
| Dry Hop   | Citra                  | 30 g   | 7 day(s) | 12 %       |
| Dry Hop   | Simcoe                 | 30 g   | 7 day(s) | 13.2 %     |
| Dry Hop   | Amarillo               | 30 g   | 7 day(s) | 9.5 %      |
| Dry Hop   | Citra                  | 30 g   | 2 day(s) | 12 %       |
| Dry Hop   | Simcoe                 | 30 g   | 2 day(s) | 13.2 %     |
| Dry Hop   | Amarillo               | 30 g   | 2 day(s) | 9.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 9.5 g  | Safale     |

## Extras

| Type   | Name    | Amount | Use for   | Time     |
|--------|---------|--------|-----------|----------|
| Flavor | Laktoza | 250 g  | Secondary | 4 day(s) |

### Notes

- Pierwsza część "na zimno" leci na burzliwą po 2 dniach. Laktoza na cichą, ciśnienie osmotyczne wrogiem.  
*Jan 22, 2018, 9:59 AM*