

ZAPA2

- Gravity **13.3 BLG**
- ABV ---
- IBU **36**
- SRM **73**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|-----|
| Liquid Extract | ekstrakt słodowy ciemny Bruntal | 3.4 kg (82.9%) | 80 % | 621 |
| Liquid Extract | ekstrakt słodowy jasny | 0.7 kg (17.1%) | 70 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Magnat | 5 g | 55 min | 13.6 % |
| Boil | Magnat | 5 g | 30 min | 13.6 % |
| Boil | Summit | 10 g | 20 min | 14.3 % |
| Boil | Summit | 10 g | 10 min | 14.3 % |
| Boil | Centennial | 10 g | 10 min | 9.7 % |
| Boil | Magnat | 10 g | 5 min | 14.3 % |
| Boil | Centennial | 10 g | 5 min | 9.7 % |
| Aroma (end of boil) | Summit | 10 g | -1 min | 14.3 % |
| Aroma (end of boil) | Centennial | 10 g | -1 min | 9.7 % |
| Aroma (end of boil) | Centennial | 20 g | -5 min | 9.7 % |
| Aroma (end of boil) | Summit | 20 g | -5 min | 14.3 % |
| Dry Hop | Centennial | 50 g | 3 day(s) | 9.7 % |
| Dry Hop | Summit | 30 g | 3 day(s) | 14.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11 g | nie wiem |