

spring comes

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **84**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (83.3%) | 79 % | 6 |
| Grain | Pszeniczny | 1 kg (16.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil | Apollo | 20 g | 60 min | 17 % |
| Boil | Bravo | 20 g | 30 min | 15.5 % |
| Boil | denali | 20 g | 30 min | 14 % |
| Aroma (end of boil) | Apollo | 20 g | 1 min | 17 % |
| Aroma (end of boil) | Denali | 20 g | 1 min | 14 % |
| Dry Hop | Barbe Rouge | 60 g | 5 day(s) | 6.6 % |
| Dry Hop | Denali | 60 g | 5 day(s) | 14 % |
| Dry Hop | Apollo | 60 g | 5 day(s) | 17 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| liberty bell | Ale | Dry | 11.5 g | --- |