

4# graff jabłkowy

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **14**
- SRM **13.3**

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 **10 %/h**
- Boil size **25.3 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------------|--------------|---------------|-------|-----|
| Dry Extract | wheat malt | 0.5 kg (4.5%) | 80 % | 12 |
| Dry Extract | barley malt | 0.5 kg (4.5%) | 80 % | 12 |
| Adjunct | sok jabłkowy | 10 kg (90.9%) | 20 % | 15 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Cascade | 15 g | 50 min | 6 % |
| Aroma (end of boil) | Cascade | 15 g | 10 min | 6 % |
| Aroma (end of boil) | Cascade | 10 g | 1 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Flavor | ksylitol | 180 g | Boil | 10 min |
| Flavor | laktoza | 250 g | Boil | 10 min |