

# Natural Derived Analysis

## Biomass Analysis of Natural Dye



### Dye Info

Dye	Madder
Raw Material	Stamps and roots of Madder
Scientific Name	Rubia cordifolia
Certification	GOTS-6.0, ZDHC

### Test Result

pMC*	51.66 +/- 0.16 pMC
REF*	100.0; = pMC/1.000
d13C	-25.0 o/oo
dpm/gC	7.01 +/- 0.02 dpm/gC

Tested by : **BETA Analytic**

- **pMC** - Percent modern carbon
- **REF** - Atmospheric adjustment factor

### Analysis Result

#### 52% Biobased carbon

Madder dye is extracted using alpha-hydroxy acids (AHAs) from *Rubia cordifolia* which is the raw material, so the bio-based carbon content is less than 100%.

AHAs are water-soluble organic acids used in cosmetics and belong to fruit acids.

- Biobased Carbon
- Fossil Carbon

