




## Technical Data Sheets



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**Mafemo Trading**  
Suppliers of African oils that are as  
natural as breathing...

## Technical datasheet – Mafura Butter

<b>Product Name:</b>	Mafura Butter	
<b>INCI Name:</b>	Trichilia Emetica	
<b>CAS:</b>	68956-68-3	
<b>EINECS:</b>	273-313-5	
<b>Tree Names:</b>	<b>Botanical:</b>	<i>Trichilia emetica</i>
	<b>Family:</b>	<i>Meliaceae</i>
	<b>Common names:</b>	Mafura butter, Natal Mahogany, Cape Mahogany, Christmas bells
	<b>Vernacular name:</b>	Muchichiri, Mutsikiri
<b>Product Description:</b>	A solid, brownish butter at ambient temperature, similar in appearance to cocoa butter. At higher temperatures it melts to give a caramel coloured oil with a characteristic perfume and an acidic taste.	
<b>Area of Origin:</b>	Zimbabwe	

### Traditional Uses:

Mafura butter has highly effective cosmetic and healing properties: the seed oil forms the basis for a leprosy remedy, is used as a cure for rheumatism and is applied to fractures in order to accelerate healing. The conditioning and colouring properties of Mafura butter have made it a popular haircare product, as well as being used on the skin to nourish and revitalise.

### Scientific Data

Characteristics	
Colour	brownish
Oleic acidity	Max 10%
Density @ 20°C	0.900 – 0.910
Saponification Value	190 – 210 mgKOH/g
Iodine Value	60 – 80 gI <sub>2</sub> /100g

Unsaturated Fatty Acids	%
Oleic Acid C18 : 1	45.0 – 55.0
Linoleic Acid* C18 : 2	8.0 – 13.0
α Linoleic Acid* C18 : 3	<1.5

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	50
Polyunsaturated Fatty Acids (Cz:2 & 3)	12
Saturated Fatty Acids (Cx:0)	38

Saturated Fatty Acids	%
Palmitic Acid C16 : 0	30.0 – 40.0
Stearic Acid C18 : 0	1.5 – 4.0

### Other properties:

Has some antimicrobial and anti-inflammatory properties due to the presence of a number of limonoids such as Trichilin A. Trichilia oil has been shown to have free radical scavenging properties higher than other oils on the market.

### Applications:

Skin:	Skin butter to nourish and revitalise
Hair:	Conditioner and colourant
Soap	Excellent oil for soap making
Furniture:	High quality wood polish

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep the product in the original packaging away from light and heat  
Inert with 0.5 to 1L of gas (ex: nitrogen)/L of packaging,  
Close quickly after using (T opening<15min).

## Technical datasheet – Marula

<b>Product Name:</b>	Marula Oil
<b>INCI Name:</b>	Sclerocarya birrea oil
<b>CAS:</b>	68956-68-3
<b>EINECS:</b>	273-313-5
<b>Tree Names:</b>	<b>Botanical:</b> <i>Scelorocarya birrea</i>
	<b>Family:</b> <i>Anacardiaceae</i>
	<b>Common names:</b> Marula, cider tree, maroela
	<b>Vernacular name:</b> Mupfura
<b>Product Description:</b>	Clear, pale, yellowish-brown seed oil
<b>Area of Origin:</b>	Zimbabwe

### Traditional Uses:

The oil from the marula kernel has given the Marula tree its spiritual status. The kernels are so full of oil that even a squeeze with the hand can release a rich yields. This healing oil is used as a cosmetic by Southern African women, and is massaged onto the skin of the face, feet and hands. Across generations it has proven to protect against dry, cracking skin and in fact its moisturising properties are so effective that it is also used to treat leather and to preserve meat. Within the Zulu tribe, the Marula tree symbolizes women's fertility, softness and tenderness. In some tribes new born baby girls are welcomed into the world with traditional Marula ceremonies.

### Scientific Data

Characteristics	
Colour	Yellow
Oleic acidity	Max 5%
Density @ 20°C	0.910 – 0.920
Saponification Value	188 – 196 mgKOH/g
Iodine Value	70 – 80 gI <sub>2</sub> /100g

Unsaturated Fatty Acids	%
Oleic Acid C18 : 1	70.0 – 78.0
Linoleic Acid* C18 : 2	4.0-7.0
α Linoleic Acid* C18 : 3	0.1-0.7

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	76
Polyunsaturated Fatty Acids (Cz:2 & 3)	6
Saturated Fatty Acids (Cx:0)	18

Saturated Fatty Acids	%
Palmitic Acid C16 : 0	9.0– 12.0
Stearic Acid C18 : 0	5.0– 8.0
Arachidic Acid C20:0	0.3-0.7

### Other properties:

Marula oil is extraordinarily stable. It has a rich content of antioxidants and excellent natural stability to oxidation. It is ten times more stable from oxidation than olive oil.

### Applications:

Skin:	To treat dry, chapping skin. To maintain hydrated, smooth skin, reduces redness. Can be used around the eyes. A good massage oil. Anti-aging face cream.
Baby care:	As massage oil
Shampoo:	For dry damaged fragile hair
Cosmetics:	Component of lipsticks
Food:	Antioxidant properties for the nutraceutical industry

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep the product in the original packaging away from light and heat

## Technical datasheet – Kalahari Melon oil

<b>Product Name:</b>	Kalahari Melon oil		
<b>INCI Name:</b>	Citrullus lanatus		
<b>CAS:</b>	90063-94-8		
<b>EINECS:</b>	290-054-3		
<b>Tree Names:</b>	<b>Botanical:</b>	<i>Citrullus lanatus</i>	
	<b>Family:</b>	<i>Cucurbitaceae</i>	
	<b>Common names:</b>	Tsamma melon, Wild watermelon, Kalahari melon	
	<b>Vernacular name:</b>	Nwiwa	
<b>Product Description:</b>	The Kalahari Wild melon is the biological ancestor of the watermelon, now found all over the world, but originated in the Kalahari region of Southern Africa. Unlike the common water melon, whose flesh is sweet and red, the Kalahari melon's juicy flesh is pale yellow or green and taste bitter. A creeping annual herb, the Kalahari melon has hairy stems, forked tendrils and three-lobed hairy leaves. Its flowers are bright yellow		
<b>Area of Origin:</b>	Zimbabwe		

### Traditional Uses:

Traditionally, a crucial water source in the Kalahari, the Kalahari wild melon has also been consumed as a food, despite its bitterness. The seeds are safely kept aside and eaten as a protein rich snack for food and for their oil content. The seeds are rich in clear, yellow oil which has a long history of cosmetic use. Traditionally used as a moisturiser to protect skin from the sun to ensure a blemish free complexion, to promote hair growth as well.

### Scientific Data

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	17
Polyunsaturated Fatty Acids (Cz:2 & 3)	64
Saturated Fatty Acids (Cx:0)	19

Unsaturated Fatty Acids		Saturated Fatty Acids	%
Oleic Acid C18 : 1 n-9	10.0-24.0	Palmitic Acid C16 : 0	7.0 – 13.0
Linoleic Acid C18 : 2 n-6	55.0 – 70.0	Stearic Acid C18 : 0	5.0 – 11.0
α Eleostearic Acid C18 : 3c n-5	<0.5		

### Other properties:

The seed contains vitamin C, B2 and G, minerals, riboflavin, fat, carbohydrates and protein. There is a high activity of detoxifying hydroxyl radicals antioxidants) possibly aiding their survival in the extraordinarily harsh Kalahari desert environment.

### Applications:

Skin:	Moisturising, restructuring, regenerating
Hair:	Conditioner
Soap:	Excellent oil for soap making

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep product in the original packaging away from light and heat (T<20°C) and in dry place.

## Technical datasheet – Mongongo/Manketti seed oil

<b>Product Name:</b>	Mongongo/ Manketti seed oil		
<b>INCI Name:</b>	Schinziophyton Rautanenii Kernel oil		
<b>CAS:</b>	68956-68-3		
<b>EINECS:</b>	273-313-5		
<b>Tree Names:</b>	<b>Botanical:</b>	<i>Schinziophyton Rautanenii</i>	
	<b>Family:</b>	<i>Euphorbiacea</i>	
	<b>Common names:</b>	Mongongo/ Manketti	
	<b>Vernacular name:</b>	Mungongoma	
<b>Product Description:</b>	The mongongo is a deciduous fruit tree measuring 7-20m tall, 1, 5 m in diameter with contorted branches bearing slender sprays of white to yellow flowers. The elliptical fruits (drupes) are reddish-brown and consist of a thin layer of sweet pulp surrounding a tasty kernel in a good year these fruits may be knee deep under the trees, yielding 200-800 kg per tree		
<b>Area of Origin:</b>	Zimbabwe		

### Traditional Uses:

Whilst the Mongongo fruits are used across the Southern African region, the most documented uses are by the Kung Bushmen of the Dope region in Botswana, to whom mongongo fruits are their primary food. The dried fruit pulp is edible for as long as 8 months, it can be eaten raw or cooked into a thick sauce or porridge. The very stable mongongo is used as a body rub to protect the skin.

### Scientific Data

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	16
Polyunsaturated Fatty Acids (Cz:2 & 3)	69
Saturated Fatty Acids (Cx:0)	15

Unsaturated Fatty Acids		Saturated Fatty Acids	%
Oleic Acid C18 : 1 n-9	10.0-20.0	Palmitic Acid C16 : 0	6.0 – 10.0
Linoleic Acid C18 : 2 n-6	30.0 – 54.0	Stearic Acid C18 : 0	4.0 – 8.0
A Eleostearic Acid C18 : 3c n-5	20.0-32.0		

### Other properties:

Mongongo is beneficial because of its content of linoleic acid (between 30% and 54%, whose derivatives are synthesized by the body and form a part of the composition of the cell membranes. Mongongo has hydrating, regenerating and restricting properties. Moreover, mongongo oil has a particular fatty acid, the alpha eleosteric acid (C18 9 c, 11t, 13t) which is able to polymerize when exposed to UV, forming a protective film. Therefore mongongo is very useful in hair care products.

### Applications:

Skin:	Moisturising, restructuring, regenerating
Hair:	Conditioner

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep product in the original packaging away from light and heat (T<20°C) and in dry place.

## Technical datasheet – Baobab Oil

<b>Product Name:</b>	Baobab Oil		
<b>INCI Name:</b>	Adansonia digitata seed oil		
<b>CAS:</b>	91745-12-19		
<b>EINECS:</b>	294-680-8		
<b>Tree Names:</b>	<b>Botanical:</b>	<i>Adansonia digitata</i>	
	<b>Family:</b>	<i>Bombacaceae</i>	
	<b>Common names:</b>	Baobab, Upside down Tree, Monkey Bread Tree	
	<b>Vernacular name:</b>	Muuyu	
<b>Product Description:</b>	Semi-fluid and golden yellow seed oil		
<b>Area of Origin:</b>	Zimbabwe		

### Traditional Uses:

It is used by African women to protect their beautiful skin and hair against the harsh African savannah environment due to its strong moisturizing and sheen properties

### Scientific Data

Characteristics	
Colour	Yellow
Oleic acidity	Max 10%
Density @ 20°C	0.910 – 0.920
Saponification Value	180 – 200 mgKOH/g
Iodine Value	65 – 95 gI <sub>2</sub> /100g

Unsaturated Fatty Acids	%

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	36
Polyunsaturated Fatty Acids (Cz:2 & 3)	31
Saturated Fatty Acids (Cx:0)	33

Saturated Fatty Acids	%
Palmitic Acid C16 : 0	18.0-30.0
Stearic Acid C18 : 0	2.0-9.0
Arachidic Acid	<2.0

### Other properties:

Baobab oil contains  $\alpha$ - and  $\beta$  carotene, antioxidant and immune-stimulating compounds. It is an excellent source of mono- and polyunsaturated fatty acids with moisturizing and protective action (palmitic, stearic and oleic acids). The high content in mono- and polyunsaturated fatty acids in baobab oil also makes it useful as a food oil and its low iodine value indicates good stability.

### Applications:

Skin:	For dry and wrinkled skin – to protect against chapping. An ingredient for sun care products
Scalp:	It is used for the scalp and hair – it gives brightness and shine to dry hair.
Hands:	Strengthens nails against breaking.
Body:	Used to massage the body for a soothing effect to a tired body

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep product in the original packaging away from light and heat (T<20°C) and in dry place, Inert with 0.5 to 1L of gas (ex: nitrogen)/L of packaging, Close quickly after using (T opening<15min).

## Technical datasheet – Ximenia Caffra

<b>Product Name:</b>	Ximenia Oil	
<b>INCI Name:</b>	Ximenia Caffra Seed Oil	
<b>CAS:</b>	95193-67-2	
<b>EINECS:</b>	305-880-2	
<b>Tree Names:</b>	<b>Botanical:</b>	<i>Ximenia caffra</i>
	<b>Family:</b>	<i>Olacaciae</i>
	<b>Common names:</b>	Sour Plum, Wild Plum
	<b>Vernacular name:</b>	Tsansva
<b>Product Description:</b>	Semi-fluid and golden yellow seed oil	
<b>Area of Origin:</b>	Zimbabwe	

### Traditional Uses:

Traditionally Africans have used Ximenia to coat their hair and bodies; it is mixed with red ochre before being applied. Nourishing and moisturizing, it naturally softens and revitalises the skin..

### Scientific Data

Characteristics	
Colour	Yellow
Oleic acidity	Max 4%
Density @ 20°C	0.910 – 0.920
Saponification Value	150 – 180 mgKOH/g
Iodine Value	65 – 95 gI2/100g

Unsaturated Fatty Acids	%
Oleic Acid C18 : 1	40.0 – 56.0
Linoleic Acid* C18 : 2	<3.0
α Linoleic Acid* C18 : 3	<3.0
Ximenynic acid C18: 1	5,0 -15,0

Average Fatty Acid Composition	%
Monounsaturated Fatty Acids (Cy:1)	87
Polyunsaturated Fatty Acids (Cz:2 & 3)	3
Saturated Fatty Acids (Cx:0)	10

Saturated Fatty Acids	%
Palmitic Acid C16 : 0	<2.5
Stearic Acid C18 : 0	<1.5

### Other properties:

Ximenia has a considerable nutritional value because it is rich in unsaturated fatty acids. Ximenia preserves the integrity of the cell wall and has a restructuring effect.. Its long chain fatty acids bring a good substantivity. The high content of saturated and monounsaturated fatty acids in Ximenia makes it stable to oxidation. Ximenia is useful for dry skin prone to early senescence and it also helps improve the function of the sebaceous tissues.

### Applications:

Skin:	Can be used in emollient creams for normal and dry skins. is appreciated for its anti ageing effect
Shampoo:	For dry, damaged and fragile hair
Cosmetics	Can be used in the composition of lipsticks

### Manufacturing Process:

First cold pressing (T<60°C) - no solvents or chemicals used. Successive filtrations of the oil through blotting paper.

### Packaging

Bulk packs: 5, 20, 100, 200kg plastic containers

### Storage and Stability:

The shelf life in sealed original containers and under normal storage conditions is two (2) years.

Before Opening: Keep away from light, heat (T<20°C) and in a dry place.

After Opening: Keep product in the original packaging away from light and heat (T<20°C) and in dry place, Inert with 0.5 to 1L of gas (ex: nitrogen)/L of packaging, Close quickly after using (T opening<15min).