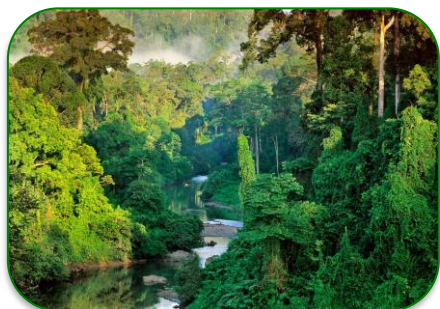




Certificate of Analysis

Product: Illipe-Refined
Batch Number: 4500105
Best Before End: March 2025

| Test method | Test | Analysis | Specification |
|----------------|-------------------------------|------------|------------------------|
| Visual | Appearance, 25 °C | Conforms | Soft Solid |
| Visual | Colour | Conforms | Off-white to yellowish |
| Lovibond 5"1/4 | Colour, Yellow/Red | 14.0Y/1.8R | ≤75.0Y/ 11.0R |
| Olfactory | Odour | Conforms | Characteristic |
| AOCS Cc 1-25 | Melting Point °C | Conform | 34 - 38 |
| AOCS Cd3d-63 | FFA (as oleic), % | 0.2 | 1.0 Max |
| AOCS Tg2a-64 | Iodine value, gI2/100g | 34 | 30 - 35 |
| AOCS Cd3-25 | Saponification Value, mgKOH/g | 189.1 | 178 - 192 |
| AOCS Cd8-53 | Peroxide value, meqO2/kg | 0.9 | 10.0 Max |



ILLIPE-REFINED

PROPERTIES

A natural emollient of universal use, **ILLIPE-REFINED** has been used for centuries to nourish and restore skin and hair's vitality and elasticity.

The crude Illipe butter used to manufacture our **ILLIPE-REFINED** is made from the nuts of the *Shorea Stenoptera*, a species of the Dipterocarpaceae plant family, typically found in Borneo. The nuts, which are 50 per cent fat, are then pressed to extract this nourishing emollient.

ILLIPE-REFINED is ideal to formulate modern skincare formulations.

ILLIPE-REFINED was used by the Aborigines in traditional medicine as a soothing balm or skin softener. Today, its properties are used as a long-lasting moisturizer. It reinforces the skin lipidic barrier while helping maintain skin moisturization.

ILLIPE-REFINED leaves a silky sensation on skin and it helps to maintain its elasticity. It is ideal for anti-ageing and moisturizing formulations. It has protective properties and restores smoothness and suppleness to skin and hair.

COSMETIC APPLICATIONS

| | |
|----------------------|--|
| Advice for use: | from 3% to 100% |
| Skin and body Care: | moisturising, anti-ageing, hand creams |
| Suncare and aftersun | |
| Hair care products: | conditioners, shampoos |
| Lipstick, Lipbalm | |
| Soaps | |

TECHNICAL DATA

| | |
|--------------------------------|--------------------------------------|
| Appearance: | Off-white to yellowish soft butter |
| Typical fatty acid composition | % |
| C16:0 (palmitic) | 15,0 – 19,0 |
| C18:0 (stearic) | 42,0 – 48,0 |
| C18:1 (oleic) | 32,0 – 38,0 |
| C18:2 (linoleic) | ≤ 1,2 |
| INCI : | <i>Shorea Stenoptera</i> Seed Butter |

Product identification

Country of origin : France
Custom Tariff : 15162095

Manufacturing process and chemical composition**Manufacturing process:**

The seeds, which contain the butter, are mechanically pressed. Purification and refining are then carried out by traditional methods without chemicals or solvents

- Harvesting of Illipe seeds
- Physical pressing: cold pressing of Illipe seeds
- Discoloration with bleaching earth
- Deodorization with steam flux
- Cooling
- filtration

Chemical composition:

| INCI/USA | INCI/EEC | CAS N°. | EINECS / ELINCS N° | Function | % |
|----------------------------------|----------------------------------|------------|-----------------------|-----------|------|
| Shorea Stenoptera Seed Butter | Shorea Stenoptera Seed Butter | 91770-65-9 | 294-851-7 | Emollient | 100% |

Impurities:

| Impurities | Nature | Specification, ppm |
|-------------------|--------|----------------------|
| Residual solvents | | None |
| Monomers | | None |
| Heavy metals | Pb | <LOQ (LOQ = 0.05ppm) |
| | As | <LOQ |
| | Cd | <LOQ |
| | Hg | <LOQ |
| | Cr | <LOQ |
| | Ni | <LOQ |
| | Others | $\Sigma < 3$ ppm |
| Pesticides | | None |

Decontamination by radioactivity

We hereby certify that the product **Illipe – Refined** has not been treated with ionising radiation.

ISO16128 guideline Information

| Substance INCI name | Ingredient type | % mass fraction | Natural index | Natural origin index | Organic index | Organic origin index |
|-------------------------------|-----------------|-----------------|---------------|----------------------|---------------|----------------------|
| Shorea Stenoptera Seed Butter | Natural | 100 % | 1 | 1 | 0 | 0 |
| Natural origin content %* | 100% | | | | | |

Natural origin content %*: the mass percentage, between 0% and 100%, of all natural ingredients and natural portions of derived natural ingredients in the product.

Reach compliance / CLP classification

Reach (CE regulation n°1907/2006)

| Substance INCI name | CAS No | EINECS | REACH registration |
|-------------------------------|------------|-----------|------------------------------|
| Shorea Stenoptera Seed Butter | 91770-65-9 | 294-851-7 | Exempted annex V paragraph 9 |

The substance **Illipe – Refined** does not meet the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008, it is not persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) as defined in Annex XIII of Regulation (EC) No 1907/2006 (REACH), and is not included in the ECHA candidate list of substances of very high concern.

Ingredient of vegetable origin

| General description of the vegetable | |
|--|---|
| INCI name of the ingredient of vegetable origin | Shorea Stenoptera Seed Butter |
| Name of the vegetable (genus – species - family) | Genus : Shorea Species : Shorea Stenoptera Family : dipterocarpacea |
| Part used | Seeds |
| Geographical origin | Malaysia, Indonesia |
| Is the plant cultivated or natural? | Cultivated |
| Is it a regulated vegetal species (CITES, IUCN red list...)? | No |

We the undersigned, certify that our **Illipe – Refined** contains no material of animal origin and thus is not concerned by BSE regulation

Storage conditions

| | |
|------------|---|
| Packaging | Plastic pails 25 kg net |
| Storage | Store in original unopened containers in a cool dry place |
| Shelf life | 24 months in original unopened containers |

Toxicological data

From information available, and based on products of very close composition **Illipe – Refined** is non-toxic under normal conditions of use.

Regulatory information - Certificate

Cosmetic directive compliance

In accordance with Regulation (EC) No 1223/2009 as regards the use in cosmetic products, **Illipe – Refined** is exempted from prohibited substances (Annex II) and substances subject to restrictions (Annex III). **Illipe – Refined** is free of phthalates, nonylphenol, alkylphenols, phenol, nitrosamines, glycol ethers and formaldehyde.

Non GMO origin

We hereby confirm that the product **Illipe – Refined**

- does not contain GMO's or GMO derived components
- no GMO derived materials or processing aids are employed in the manufacture of this product.

Non animal testing

We hereby confirm that **Illipe – Refined** of our manufacture, has not been tested on animals.



Absence CMR

It is certified that the product **Illipe – Refined** does not contain carcinogenic, mutagenic or reprotoxic (CMR) substances of categories 1, 2, 3 or 1A, 1B or 2 listed in regulation 1272/2008 and amendments: commission regulation (CE) n° 790/2009 and n°286/2011.

Allergens certificate

It is hereby certified that the product **Illipe – Refined** of our manufacture, does not contain any of the allergens listed in the Regulation (EC) No 1223/2009 (Annex III).

No observable adverse effect level - NOAEL

Illipe – Refined meets the EC Directive 76/648/EEC and no adverse effects have been reported after a use in the cosmetic industry for more than 10 years.

Based on in-vivo uses our **Illipe – Refined** has been identified non toxic under normal conditions of use.

SVHC declaration

It is certified that the product **Illipe – Refined** of our manufacture does not contain substances identified as SVHC featuring in the "REACH candidate list" published.

The "REACH candidate list" is present on ECHA web site and has been updated on the link below.

Link: http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Absence dioxin

We hereby certify that the product **Illipe – Refined**, of our manufacture, does not contain dioxin.

Absence VOC

We hereby confirm that **Illipe – Refined** of our manufacture, does not contain Volatile Organic Compounds.

Petrochemical free declaration

We hereby confirm that **Illipe – Refined** of our manufacture, does not contain petrochemical material.

Absence nanomaterials

We hereby certify that our **Illipe – Refined** does not contain nanomaterials.

Gluten free

We certify that the product **Illipe – Refined** that we manufacture is Gluten free.

No gluten derived materials or processing aids are employed in the manufacture of this product.

Nuts contact declaration

We hereby certify that the product **Illipe – Refined** that we manufacture never enter in contact with nuts products during the production steps.

No nuts derived materials or processing aids are employed in the manufacture of this product.

Microbiological impurities

Illipe – Refined respects the below specifications :

- Bacteria specification < 100 cfu/g/ml
- Yeasts and moulds specification <10 cfu/g/ml
- Absence of pathogen micro-organisms :
 - Absence of Pseudomonas aeruginosa
 - Absence of Escherichia coli
 - Absence of Staphylococcus aureus
 - Absence of Enterococcus faecium and Enterococcus faecalis

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK

Tel: 01425 655555 Email: technical@madarcorporation.co.uk



- Absence of Candida albicans

Formaldehyde Free

We hereby confirm that our **Illipe – Refined** is free of formaldehyde

Vegan Statement

We hereby confirm that our **Illipe – Refined**, listed above, complies with vegan requirements.

Our **Illipe – Refined** is not produced from any animal derived ingredients and has not been tested on animals.

Veganism is a way of living which seeks to exclude, as far as is possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose.

Global restriction

| | |
|-----------|----------------|
| Europe | No restriction |
| USA | No restriction |
| Canada | No restriction |
| Japan | No restriction |
| China | No restriction |
| Australia | No restriction |
| Korea | No restriction |

February 2020

This document completes the product technical and safety data sheet. Information contained in this notice are based on our current knowledge and relate to the product in the state in which it is delivered

This certificate does not exempt or prevent the user to test under its own responsibility the material described in the document

Note: The substance Illipe - Refined does not meet the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008. It is not persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) as defined in Annex XIII of Regulation (EC) No 1907/2006 (REACH), and is not included in the ECHA candidate list of substances of very high concern. Provision of a Material Safety Data Sheet (MSDS) is thus not mandatory (REACH Art. 31). This Safety Data Sheet (SDS) is a voluntary presentation of certain information that may assist the user in the handling of the product. This SDS is provided in English.

Section 1- IDENTIFICATION

| | |
|------------------------------|---|
| <i>Product name:</i> | ILLIPE-REFINED |
| <i>REACH Registration .:</i> | “No registration number is given for this substance since it is exempted from the registration requirements according to REACH annex V.” |
| <i>Uses :</i> | Cosmetic applications |
| <i>Supplier</i> | Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate. Fordingbridge, SP6 1PA Tel : +44 (0)1425 655 555 technical@madarcorporation.co.uk |
| <i>Emergency tel.</i> | +44 (0)1425 655 555 |

Section 2 - HAZARDS IDENTIFICATION

No hazards identified under Regulation (EC) No 1272/2008
No Hazard symbol required according to Directive 1999/45/EC, 67/548/EEC

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| | |
|----------------------------------|---|
| <i>Description/Chemical name</i> | Triglycerides of vegetable origin |
| | INCI EU/US: Shorea Stenoptera Seed Butter |
| | CAS 91770-65-9 |
| | EINECS 294-851-7 |
| <i>Hazardous components</i> | None |
| <i>Additives</i> | None |

Section 4 - FIRST AID MEASURES

| | |
|---------------------|---|
| <i>Eye contact</i> | Flush eyes with plenty of water. Seek medical attention if any irritation persists. |
| <i>Skin contact</i> | Wash with plenty of soap and water. |
| <i>Ingestion</i> | Not considered dangerous. In high dosage, seek medical attention. |

Section 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| <i>Suitable extinguishing media:</i> | Dry powder, CO ₂ , foam, sand. |
| <i>Special risks:</i> | None identified. |
| <i>Special precautions for fire fighting:</i> | Use self-contained breathing apparatus in conditions of thick smoke. Cool containers at risk with water spray jet. |

Section 6 - ACCIDENTAL RELEASE MEASURES

| | |
|-----------------------------------|---|
| <i>Individual precautions:</i> | Wear protective clothing. |
| <i>Environmental precautions:</i> | Do not discharge into drains, surface water, ground water. Recuperate the spilled product. Wash with water and detergent. Recuperate all material in a suitable labelled container for disposal. |

Section 7 - HANDLING AND STORAGE

| | |
|------------------|---|
| <i>Handling:</i> | Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing. |
| <i>Storage:</i> | This material is not hazardous under normal storage conditions; however, material should be stored in a cool dry place in unopened containers. Do not expose containers to source of heat. |

Section 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

| | |
|-------------------------|---|
| <i>Skin protection:</i> | Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash thoroughly after handling. |
| <i>Eye protection:</i> | Use good industrial practice to avoid eye contact. |

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|--|
| <i>Appearance</i> | Soft solid |
| <i>Colour</i> | Off White to yellowish |
| <i>Odour</i> | Characteristic |
| <i>Melting point</i> | 34,0 – 38,0 °C |
| <i>Boiling point</i> | > 200°C |
| <i>Flash point</i> | > 200°C |
| <i>Auto-ignition temperature</i> | > 200°C |
| <i>Solubility</i> | Insoluble in water. Soluble in other vegetable oils. |

Section 10 - STABILITY AND REACTIVITY

| | |
|---|---|
| <i>Conditions to avoid</i> | No hazardous reactions identified. Product becomes rancid on extended exposure to air. |
| <i>Materials to avoid</i> | Strong oxidizing agents. |
| <i>Hazardous decomposition products</i> | On combustion, toxic vapours such as carbon monoxide may be produced |

Section 11 - TOXICOLOGICAL INFORMATION

From information available, this substance is non toxic under normal conditions and is not classified in EEC listing.

Section 12 - ECOLOGICAL INFORMATION

| | |
|---------------------------|---|
| <i>Biodegradation</i> | Expected to be ultimately biodegradable |
| <i>Fish toxicity</i> | No data (water insoluble) |
| <i>Bacterial toxicity</i> | No data |

Section 13 - DISPOSAL CONSIDERATIONS

| | |
|----------------|--|
| <i>Product</i> | The disposal should be in accordance with all applicable regulations. Do not discharge into drains, surface and ground water. Do not reject waters of wash in the natural environment or the sewers. |
|----------------|--|

Section 14 - TRANSPORT INFORMATION

| | |
|-------------|-----------------|
| <i>ADR</i> | Not classified. |
| <i>IMDG</i> | Not classified |
| <i>IATA</i> | Not classified |

Section 15 - REGULATORY INFORMATION

Classification and labelling according to EC 1272/2008

| | |
|--------------------------|------|
| No classification | |
| Pictogram | none |
| H phrase (Hazard) | none |
| P phrase (Precautionary) | none |

Section 16 - OTHER INFORMATION

No classification or hazards labelling under regulation 1907/2006 (REACH) and EU Regulation 2015/830 and classification according to EC Regulation 1272/2008 (CLP).

| | |
|------------------------|--------------------------------|
| <i>Creation date</i> : | September 2018; Version n° 001 |
| Revision date: | February 2020; Version n°002 |

This document completes the product technical data sheet but does not replace it. The information contained in this notice is based on current knowledge and relates to the product in the state in which it is delivered. It is intended to describe the product from the point of view of safety requirements and does not guarantee any particular property or use.

The user takes full responsibility for the use of the product and it is his further responsibility to ensure that the product is employed in complete conformity with all relevant regulations.

SPECIFICATION SHEET

ILLIPE-REFINED

| | |
|----------|-------------------------------|
| INCI EU: | Shorea Stenoptera Seed Butter |
| INCI US: | Shorea Stenoptera Seed Butter |
| CAS | 91770-65-9 |
| EINECS | 294-851-7 |

| | Specification | Method |
|-------------------------------|------------------------|-----------------|
| Appearance, 25°C | Soft solid | Visual |
| Color | Off-white to yellowish | Visual |
| Color, Yellow/red | ≤75,0Y/11,0R | Lovibond 5''1/4 |
| Odor | Characteristic | Olfactory |
| Melting point, °C | 34,0 – 38,0 | AOCS Cc 1-25 |
| Acid value, mgKOH/g | 1,0 max. | AOCS Cd3d-63 |
| Iodine value, gI2/100g | 30,0 – 35,0 | AOCS Tg2a-64 |
| Saponification value, mgKOH/g | 178,0 – 192,0 | AOCS Cd3-25 |
| Peroxide value, meqO2/kg | 10,0 max. | AOCS Cd8-53 |
| Fatty acids composition, % | | GLC |
| Palmitic acid C16:0 | 15,0 – 19,0 | |
| Stearic acid C18:0 | 42,0 – 48,0 | |
| Oleic acid C18:1 | 32,0 – 38,0 | |
| Linoleic acid C18:2 | ≤ 1,2 | |
| Arachidic acid C20:0 | Tr. | |
| Others | ≤ 2,0 | |

| | |
|------------|---|
| Packaging | Plastic pails 25 kg net, drums 180 kg net |
| Storage | Store in original unopened containers in a cool dry place |
| Shelf life | 24 months in original unopened containers |
| Safety | Refer to SDS. Not considered hazardous |

STATEMENT - ILLIPE BUTTER - SUSTAINABILITY

INCI : Shorea Stenoptera Seed Butter

Illipe species or Shorea spp. is a Southeast Asian forest tree.

In term of greenhouse gas emissions, the impact of Illipe tree cultivation is neutral when compared to undrained secondary peat swamp forest. The Illipe nuts are an important non-timber forest product with a high commercial value. The fruiting usually occurs every 3–4 years after a period of several rainless weeks. The tree also produces quality timber for plywood face-veneer. Illipe species were chosen for cultivation because they tolerate frequent inundation and do not require drainage. Their rapid growth reduced the high temperatures on previously sunlight-exposed peatland, which further reduced CO₂ emissions. The biomass accumulation makes the cultivation of this large tree species an efficient carbon sequestering system in tropical rain forests. The growth of the trees will continue to add to the positive carbon balance. A strategy for restoring tropical peat forest based on illipe nut cultivation could target a number of objectives, including, carbon emissions reduction, biodiversity conservation and the provision of non-timber forest products for the food and cosmetics industry in cooperation with local community members.

Peatlands are considered degraded when they have been drained or subjected to altered water flow but have not been completely converted for other land uses. In this degraded state, the carbon stored in plant material buried in peat soil is released into the atmosphere. Dried peat is also susceptible to ground fires, releasing large amounts of stored carbon in short order.

Degraded peatlands are responsible for a large portion of carbon emissions from natural systems. Peat soils can be restored, however, to prevent the further breakdown of stored plant material and to capture new plant debris from vegetation growing aboveground. The primary method of restoration involves “re-wetting” or restoring the natural flow of water and soil saturation.

Manufacturing process of Illipe Butter

The harvest of the nuts follows traditional procedures. The nuts, which contain the butter, are mechanically pressed (cold pressing). Purification and refining are then carried out by traditional methods without chemicals or solvents: Discoloration is processed with bleaching earth and deodorization with steam flux. After cooling and filtration, the butter is ready to be commercialized.

June 2020