| biOrigins |
|--------------------------------|
| Certificate of Analysis |

| PRODUCT DETAILS | PRODUCT DETAILS | | | | | |
|----------------------------------|--|--|--------|-----------------------------------|----------|--|
| Product Name | | PASSION FRUIT SEED OIL | | | | |
| Product Code | | OVPASS | | | | |
| | | | | | | |
| | | | | | | |
| Batch Number | | 4499105 | | | | |
| Best Before End | | March 2025 | | | | |
| | | | | | | |
| | | | | | | |
| Identification | | CAS No: 91770-48-8 | | EINECS No: 294-833-9 | | |
| | | Alternative CAS: 97676-26-1 | | | | |
| PHYSICAL AND CHEM | | HARACTERISTIC | | | | |
| | | SPECIFICATION RANGE | | RESULTS | | |
| Appearance | Appearance | | Liquid | | Conforms | |
| Colour | | Light (or pale). Yellow | | Conforms | | |
| Odour | | Neutral | | Conforms | | |
| Relative Density @ 20°C | | 0.915 - 0.925 | | 0.922 | | |
| Refractive Index @ 20°C | | 1.470 - 1.480 | | 1.475 | | |
| Flash Point °C | | ≥200 | | Conforms | | |
| Acid Value (mgKOH/g) | | ≤1.0 | | 0.01 | | |
| Iodine Value (mg/g) | | 125.0 - 150.0 | | 141 | | |
| Saponification Value (mgKC |)H/g) | 185.0 - 195.0 | | 192 | | |
| FATTY ACID PROFILE % | | | | | | |
| FATTY ACID RANGE | RESULT | FATTY ACID RANGE | RESULT | FATTY ACID RANGE | RESULT | |
| C14:0 Myristic Acid ≤1.0% | 0.1 | C16:0 Palmitic Acid 4.0-12.0% | 7.1 | C18:0 Stearic Acid 1.0-6.0% | 2.8 | |
| C18:1 Oleic Acid 5.0-25.0% | | C18:2 Linoleic Acid 65.0 - 85.0% | 73.3 | C18:3 Linolenic Acid ≤1.0% | 0.1 | |
| STORAGE AND SHELF | LIFE | | | | | |
| Storage Store | | Store in tightly closed container with minimum headspace in a cool, dark and dry | | | | |
| | | place. | | | | |
| Shelf Life | 124 Months unopened and stored as above. | | | | | |

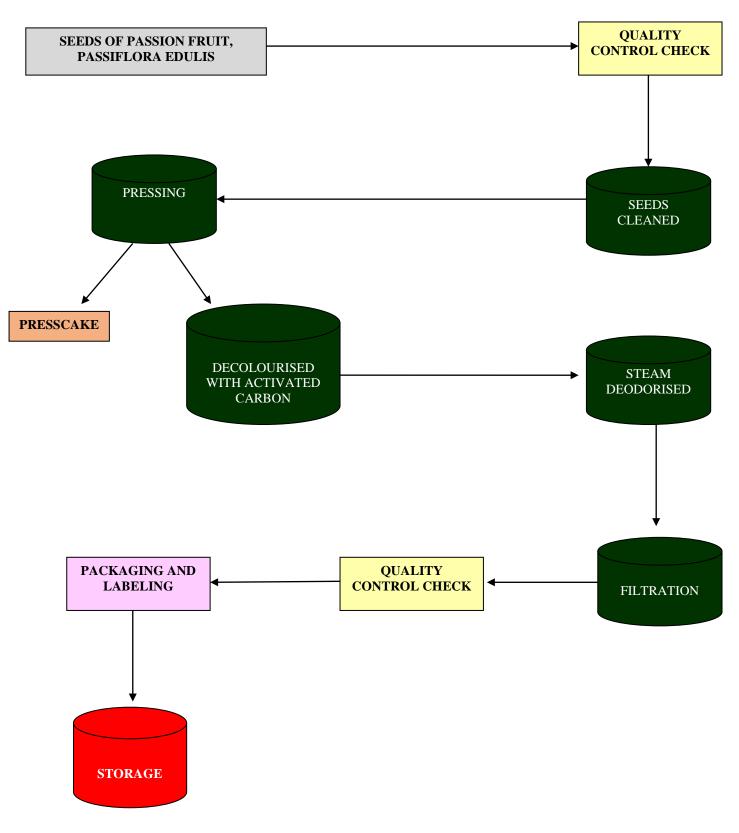
DISCLAIMER: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the Company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where MADAR make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.

Issue No: 1

07/06/2018



PASSIONFRUIT VIRGIN FLOW CHART





SAFETY DATA SHEET PASSION FRUIT SEED OIL

| SECTION 1: Identification of the substance/mixture and of the company/undertaking | | |
|--|---|--|
| 1.1. Product identifier | | |
| Product name | PASSION FRUIT SEED OIL | |
| Synonyms; trade names | Passiflora Edulis Seed Oil | |
| CAS number Alternative | 91770-48-8 | |
| Cas Number | 97676-26-1 | |
| | | |
| EC number | 294-833-9 | |
| 1.2. Relevant identified uses of the substance or mixture and uses advised against | | |
| Identified uses | Industrial, only for professional use | |
| 1.3. Details of the supplier of | the safety data sheet | |
| Supplier | Madar Corporation Limited | |
| | 19 - 20 Sandleheath Industrial Estate | |
| | Fordingbridge | |
| | SP6 1PS | |
| | Tel. +44 1425 655 555 | |
| | e-mail technical@madarcorporation.co.uk | |
| | | |

1.4. Emergency telephone number

| SECTION 2: Hazards ident | ification |
|-------------------------------|--------------------|
| 2.1. Classification of the su | bstance or mixture |
| Classification (EC 1272/200 |)8) |
| Physical hazards | Not Classified |
| Health hazards | Not Classified |
| Environmental hazards | Not Classified |
| 2.2. Label elements | |
| EC number | 294-833-9 |
| Hazard statements | NC Not Classifie |
| 2.3. Other hazards | |

| SECTION 3: Composition/information on ingredients | | |
|---|---|--|
| 3.1. Substances | | |
| Product name | PASSION FRUIT SEED OIL | |
| CAS number | 91770-48-8 | |
| EC number | 294-833-9 | |
| SECTION 4: First aid measure | 95 | |
| 4.1. Description of first aid me | asures | |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. Get medical attention if any discomfort continues. | |
| Ingestion | Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. | |
| Skin contact | Wash skin thoroughly with soap and water or use an approved skin cleanser. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. | |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. | |
| 4.2. Most important symptoms | and effects, both acute and delayed | |
| General information | No further information available at this time. | |
| 4.3. Indication of any immedia | te medical attention and special treatment needed | |
| Notes for the doctor | No data available. | |
| SECTION 5: Firefighting measures | | |
| 5.1. Extinguishing media | | |
| Suitable extinguishing media | Use as appropriate carbon dixoide (CO2), dry chemical or foam | |
| Unsuitable extinguishing media | For safety reasons do not use full water jet. | |
| 5.2. Special hazards arising from | om the substance or mixture | |
| Specific hazards | This product is made up of inflammable material with low risk. The product may only form ignitable mixtures or burn only upon heating above the flash point. However, minor contamination by lightly volatile hydrocarbons may increase the hazard. Ignition hazard at welding at the empty container. In case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO2), smoke, soot. | |
| 5.3. Advice for firefighters | | |
| Protective actions during firefighting | Avoid breathing fire gases or vapours. Control run-off water by containing and keeping it out of sewers and watercourses. | |
| Special protective equipment for firefighters | Wear full protective clothing | |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow safety measures as mentioned in sections "handling and storage" and "exposure controls/personal protection". Keep unnecessary and unprotected personnel away from the spillage. No smoking, sparks, flames or other sources of ignition near spillage. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Use suitable respiratory protection if ventilation is inadequate. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning upAbsorb with liquid binding material (e.g sand, diatomaceous earth, acid or universal binding
agents). Collect in closed and suitable containers for disposal. Never return spills in original
containers for re-use. Wash spill site after material pick up is complete.

6.4. Reference to other sections

| SECTION 7: Handling and storage | |
|---------------------------------|--|
| | |

7.1. Precautions for safe handling

Usage precautions Apply good manufacturing practice and industrial hygiene practices. Keep containers sealed when not in use. Use personal protection equipment as mentioned under "exposure controls and personal protection". Avoid contact with skin, eyes and clothing. Use only outdoors or in a well-ventilated area. Use suitable respiratory protection if ventilation is inadequate. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not eat, drink or smoke when using this product. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

8.1. Control parameters

8.2. Exposure controls

Protective equipment





| Appropriate engineering controls | Provide eyewash station Provide adequate ventilation. |
|-------------------------------------|---|
| Personal protection | Use personal protection according to Directive 89/686/EEC |
| Eye/face protection | Approved safety goggles. |
| Hand protection | Chemical resistant gloves (PVC) |
| Other skin and body protection | Wear apron or protective clothing in case of contact. |
| Hygiene measures | Good personal hygiene procedures should be implemented. |

| Respiratory protection | Generally unnecessary in a well ventilated area. If ventilation is insufficient, respiratory protection must be worn. |
|------------------------------------|--|
| Environmental exposure controls | Avoid discharging into drains. Do not allow run-off fire fighting to enter drains or water courses. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | Liquid. | |
|--|---|--|
| Colour | Light (or pale). Yellow. | |
| Odour | Neutral | |
| Initial boiling point and range | ≥350°C | |
| Flash point | \geq 200°C | |
| Relative density | 0.915 - 0.925 @ 20°C | |
| Solubility(ies) | Insoluble in water. Soluble in oil and ethanol | |
| 9.2. Other information | | |
| Refractive index | 1.470 - 1.480 @ 20°C | |
| Hydrocarbon Content | | |
| SECTION 10: Stability and re | eactivity | |
| 10.1. Reactivity | | |
| Reactivity | Oxidation with atmospheric oxygen. Formation of free fatty acids. | |
| 10.2. Chemical stability | | |
| Stability | Stable under the prescribed storage conditions. | |
| 10.3. Possibility of hazardou | s reactions | |
| Possibility of hazardous reactions | Reacts with oxidants. | |
| 10.4. Conditions to avoid | | |
| Conditions to avoid | Avoid heat, flames and other sources of ignition. | |
| 10.5. Incompatible materials | | |
| Materials to avoid | Avoid contact with strong oxidising agents. | |
| 10.6. Hazardous decomposit | tion products | |
| Hazardous decomposition products | No dangerous decomposition products expected by intended use. | |
| SECTION 11: Toxicological information | | |
| 11.1. Information on toxicological effects | | |
| Toxicological effects | There are no known health hazards associated with this product. | |
| Acute toxicity - dermal Notes (dermal LD₅₀) | No information available. | |
| Skin corrosion/irritation Skin corrosion/irritation | Not available. 19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK Tel: 01425 655555 Email: technical@madarcorporation.co.uk Page 6 of 10 | |

| Carcinogenicity Carcinogenicity | No information available. | |
|---|---|--|
| Aspiration hazard Aspiration hazard | No data available. | |
| SECTION 12: Ecological info | ormation | |
| 12.1. Toxicity | | |
| Toxicity | No information available. | |
| Chronic aquatic toxicity | | |
| Toxicity to soil | No data available. | |
| 12.2. Persistence and degra | dability | |
| Biodegradation | Expected to be readily biodegradable. | |
| 12.3. Bioaccumulative poten | itial | |
| Bioaccumulative potential | Possible | |
| 12.4. Mobility in soil | | |
| 12.5. Results of PBT and vP | VB assessment | |
| 12.6. Other adverse effects | | |
| SECTION 13: Disposal cons | siderations | |
| 13.1. Waste treatment method | ods | |
| Disposal methods | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not empty into drains. Avoid releasing into the environment. | |
| SECTION 14: Transport info | rmation | |
| General | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). | |
| 14.1. UN number | | |
| Not applicable. | | |
| 14.2. UN proper shipping na | Ime | |
| Not applicable. | | |
| 14.3. Transport hazard class | s(es) | |
| No transport warning sign re | equired. | |
| 14.4. Packing group | | |
| Not applicable. | | |
| 14.5. Environmental hazards | <u>8</u> | |
| Environmentally hazardous substance/marine pollutant No. | | |
| | | |
| 14.6. Special precautions for | r user | |
| 14.6. Special precautions for Not applicable. | r user | |

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

| SECTION 15: Regulator | y information | | |
|-------------------------------|--|--|--|
| 15.1. Safety, health and | 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture | | |
| EU legislation | Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). | | |
| Guidance | CHIP for everyone HSG228. | | |
| 15.2. Chemical safety as | 15.2. Chemical safety assessment | | |
| SECTION 16: Other information | | | |
| Revision date | 13/01/2021 | | |
| Revision | 2 | | |
| Supersedes date | 06/06/2018 | | |
| SDS number | 5177 | | |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



| Product Name | PASSION FRUIT SEED OIL | |
|---|--|-------------------------------------|
| | | |
| Tariff Number | 15159060 | |
| Country of Origin | Various | |
| INCI Name | Passiflora Edulis Seed Oil | |
| Natural Status | We hereby declare, to the best of our knowledge and from information received from our supplier, that this product is in accordance to the requirements of Articles 3 (2) (d) of Regulation (EC) 1334/2008 and therefore can be designated as natural. This product does not contain any solvents or additives. | |
| Food Grade Status | We confirm, from information received from our supplier, that this product conforms with EU Regulations and can be used in food. | |
| Kosher Certified | Not Certified | |
| Halal Certified | We hereby declare, from information received from our supplier, that this product does not contain any ingredient derived from animal origin, extracted from hair or feathers, animal fats, animal extracts, blood of any origin, blood plasma, pork and/or other meat products. This product does not contain alcoho (ethanol or grain alcohol) and has not been used in the manufacturing process. | |
| GMO Declaration | To the best of our knowledge and from information received from our supplier, this product does not derive from genetically modified starting raw material, or additives that are derived from genetically modifed organisms. | |
| Manufacturing Process | Please request Flowchart. | |
| Identification | CAS No: 91770-48-8 | EINECS No: 294-833-9 |
| | Alternative CAS: 97676-26-1 | |
| PHYSICAL AND CHEMICAL | CHARACTERISTIC | |
| Appearance | Liquid | |
| Colour | Light (or pale). Yellow | |
| Odour | Neutral | |
| Relative Density @ 20°C | 0.915 - 0.925 | |
| Refractive Index @ 20°C | 1.470 - 1.480 | |
| Flash Point °C | ≥200 | |
| Acid Value (mgKOH/g) | ≤1.0 | |
| Iodine Value (mg/g) | 125.0 - 150.0 | |
| Saponification Value (mgKOH/g) | 185.0 - 195.0 | |
| FATTY ACID PROFILE % | | |
| C14:0 Myristic Acid ≤1.0 | C16:0 Palmitic Acid 4.0 - 12.0 | C18:0 Stearic Acid 1.0 - 6.0 |
| C18:1 Oleic Acid 5.0 - 25.0 | C18:2 Linoleic Acid 65.0 - 85.0 | C18:3 Linolenic Acid ≤1.0 |
| FRAGRANCE ALLERGENS | | |
| NOT APPLICABLE | | |
| | | |
| FOOD ALLERGENS | | |
| NONE PRESENT | | |
| IFRA | | |
| | | |
| STORAGE AND SHELF LIFE | | |
| Storage | brage Store in tightly closed container with minimum headspace and dry place. | |
| helf Life 24 Months unopened and stored as above. | | |

is, to the best of the Company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the users responsibility to satisfy himself as to the suitability of such information for his own particular use. Where we make a declaration that allergenic material are not present in any product, this statement is made assuming reasonable levels of detection. It is impossible to guarantee the "absolute absence" of any material. It is the ultimate responsibility of the customer to ensure the safety of the intended final product containing this material, by carrying out additional tests if necessary.



Vegan Statement

| IDENTIFICATION | | |
|--|-------------------------|--|
| Product: PASSION FRUIT SEED OIL | | |
| Cas No: 91770-48-8 / 97676-26-1 | | |
| EINECS No: 294-833-9 | | |
| STATEMENT | | |
| We, Madar Corporation Limited, from information received from our su declare that the material listed above is compliant with a vegan diet. It does not contain any animal ingredients or animal by products. No an or by products are used in the manufacturing process. | | |
| This document represents to the best of our knowledge and from information received | d from our supplier. It | |
| does not release the buyer from the obligation to carry out an examination of the good made by the buyer are done under their own responsibility. | ds received. All uses | |