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| 1. **Identification of the substance/mixture and of the company/undertaking** | |
| * 1. **Product identifiers** | |
| Product name | Cannabinol (CBN) Isolate |
| Product code | M01 |
| Quantity | 1g - 1kg |
| Process | CBN obtained by controlled conversion of natural cannabinoids through enzymatic pathways |
| Customs number | 3301.3000 |
| Brand | Breathe Life Sciences Ltd |
| REACH No. | A registration number for this substance is not available as the substance or its use is excluded from registration, the annual tonnage does not require registration, or registration is foreseen for a later date. |
| * 1. **Relevant identified uses of the substance or mixture and uses advised against** | |
| **Application of the preparation:**  Basic raw material for the chemical industry  Basic raw material for cosmetics  Basic raw material for R&D | |
| * 1. **Details of the supplier providing the Safety Data Sheet** | |
| Breathe Life Sciences Ltd.  Grand Union Studios,  332 Ladbroke Grove,  London,  England,  W10 5AD | |
| * 1. **Emergency number** | |
| +111 (UK NHS Direct)  +112 (EU Emergency) | |
| 1. **Potential hazards** | |
| * 1. **Classification of the substance or mixture** | |
| GHS07: Harmful (acute toxicity, skin and eye irritation)  GHS08: May form harmful dust in the air (sensitization of the respiratory tract). | |
| * 1. **Label contents** | |
| **R-Phrases**  H302 (harmful if swallowed)  **P-Phrases**  P201 (obtain special instruction before use)  P202 (do not handle until all safety precautions have been read and understood)  P264 (was hands, forearms and other exposed areas thoroughly after handling)  P273 (avoid release to the environment)  P280 (wear protective gloves, protective clothing and eye protection)  P301 + P314 (if swallowed, get medical advice if you feel unwell)  P308 + P313 (if exposed or concerned, get medical advice)  P405 (store locked up)  P501 (dispose of contents/container in accordance with local, regional, national and international  regulations) | |
| * 1. **Other hazards** | |
| Based on the available data, the product does not contain components considered to be PBT (bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative) in percentages equal to or greater than 0.1% or higher. | |

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| 1. **Substances/mixture of substances** | | | | |
| **Ingredient** | **CAS No.** | **Hazard Level** | **Chemical Formula** | **Molecular Weight** |
| **Cannabinol – Derived from natural sources (CBN)** | 521-35-7 | Acute Toxic, H302  Aquatic Chronic, H413 | 6,6,9-trimethyl-3-pentyl-6H-dibenzo[b,d]pyran-1-ol | 310.4 |
| The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EU) 1272/2008 (CLP) (and subsequent amendments and supplements) In such quantities as to require the statement. | | | | |

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| 1. **First aid measures** | | | |
| * 1. **Description of first aid measures** | | | |
| **Ingestion:** Wash out mouth with water and then drink plenty of water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  **Inhalation:** Fresh air. Get medical attention if symptoms occur.  **Skin contact:** If irritation occurs, wash with soap and rise thoroughly.  Remove contaminated clothing and shoes.  **Eye contact:** Immediately flush eyes with plenty of water. Check for and remove any contact lenses. Get medical attention if irritation occurs. | | | |
| * 1. **Most important acute or delayed symptoms and effects** | | | |
| **Potential acute health effects**  **Ingestion:** This material is harmful orally and can adverse health effects or death in significant amounts.  **Inhalation:** Dust may be harmful or cause irritation.  **Skin contact:** Prolonged exposure may cause skin irritation.  **Eye contact:** May cause slight irritation to eyes.  **Over-exposure signs**  **Ingestion:** No specific data.  **Inhalation:** No specific data.  **Skin contact:** No specific data.  **Eye contact:** No specific data. | | | |
| * 1. **Information about immediate medical assistance or special treatment** | | | |
| **Notes to physician:** No specific data.  **Specific treatment:** No specific treatment. | | | |
| 1. **Firefighting measures** | | | |
| * 1. **Extinguishing agents** | | | |
| **Suitable extinguishing media:** Chemical powder, carbon dioxide or water spray. Fight lager fires with water spray.  **Unsuitable extinguishing media:** Water with full jet. Heavy water stream may spread fire. | | | |
| * 1. **Special hazards arising from substance or mixture** | | | |
| **Fire Hazard:** In case of fire, the following can be released: carbon monoxide (CO), carbon dioxide (CO2).  **Explosion Hazard:** Dust explosion hazard in air. | | | |
| * 1. **Instructions for firefighting** | | | |
| Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. | | | |
| * 1. **Further information** | | | |
| N/A. | | | |
| 1. **Accidental release measures** | | | |
| * 1. **Personal precautions, protective equipment, and emergency procedures** | | | |
| Do not touch or walk-through split material. Put on appropriate personal protective equipment.  **General measures:** Do not get in eyes, on skin or on clothing. Do not breathe dust. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. | | | |
| * 1. **Environmental precautions** | | | |
| Prevent entry to sewers and public waters. Avoid release to the environment. | | | |
| * 1. **Methods and materials for retention and cleaning** | | | |
| **For containment:** Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.  **Methods for cleaning up:** Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Use explosion proof vacuum during clean-up, with appropriate filter.  Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools. | | | |
| * 1. **Reference to other sections** | | | |
| N/A. | | | |
| 1. **Handling and storage** | | | |
| * 1. **Protective measures for safe handing** | | | |
| **Additional Hazards When Processed:** Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.  **Precaution for safe handling:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Do not get in eyes, on skin or on clothing. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, and hot surfaces. | | | |
| * 1. **Conditions for safe storage under consideration of incompatibilities** | | | |
| Store in original container protected from direct sunlight in a dry, cool (<20°C) and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. | | | |
| * 1. **Specific end uses** | | | |
| N/A. | | | |
| 1. Exposure controls/personal protective equipment | | | |
| * 1. **Parameters to be monitored** | | | |
| No data available. | | | |
| * 1. **Limitation and monitoring of exposure** | | | |
| Personal Hygiene measures suitable protection | General industrial hygiene measures | | |
| Personal protective equipment: eye/face protection | Safety eyewear | | |
| Personal protective equipment: skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product | | |
| Personal protective equipment: body protection | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product | | |
| Personal protective equipment: respiratory protection | Wear a face mask if extended exposure is anticipated. | | |
| Environmental exposure monitoring | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation | | |
| 1. Physical and chemical properties | | | |
| * 1. **Information on basic physical and chemical properties** | | | |
| Appearance | | Powder | |
| Colour | | White - Pink | |
| Odour | | Characteristic | |
| Odour threshold | | N/A | |
| pH | | N/A | |
| Melting point/freezing point | | 77 °C | |
| Initial boiling point and range | | 180-190 °C | |
| Flash point | | Open cup > 212 °C | |
| Evaporation rate | | N/A | |
| Flammability (solid, gaseous) | | No data available | |
| Upper ignition or explosion limits | | N/A | |
| Lower ignition or explosion limits | | N/A | |
| Vapour pressure | | N/A | |
| Vapour density | | N/A | |
| Relative density | | N/A | |
| Water solubility | | Insoluble in water | |
| Partition coefficient n-octanol/water | | N/A | |
| Auto-ignition temperature | | N/A | |
| Decomposition temperature | | N/A | |
| Viscosity | | N/A | |
| Explosive properties | | N/A | |
| Oxidizing properties | | N/A | |
| Kinematic viscosity | | N/A | |
| Particle characteristics | | N/A | |
| * + 1. **Information with regards to physical hazard classes** | | | |
| Molecular weight: 310.4 g/mol  Formula: C21H26O2. | | | |
| * + 1. **Other safety characteristics** | | | |
| N/A. | | | |
| 1. Stability and reactivity | | | |
| * 1. **Reactivity** | | | |
| No specific test data related to reactivity available for this product or its ingredients. | | | |
| * 1. **Chemical stability** | | | |
| The product is stable. | | | |
| * 1. **Possibility of dangerous reactions** | | | |
| Under normal conditions of storage and use, hazardous reactions will not occur. | | | |
| * 1. **Conditions to avoid** | | | |
| Direct sunlight, extremely high or low temperatures. | | | |
| * 1. **Incompatible materials** | | | |
| See section 7. | | | |
| * 1. **Hazardous decomposition products** | | | |
| Smoke and irritating vapours when heated to decomposition. | | | |
| 1. Toxicological information | | | |
| * 1. **Information on toxicological effects** | | | |
| Acute toxicity | | No data available | |
| Etchant/irritant effect on skin | | No data available | |
| Severe eye damage/irritation | | No data available | |
| Sensitisation of the respiratory tract/skin | | Not data available | |
| Germ cell mutagenicity | | Not data available | |
| Carcinogenicity | | Not data available | |
| Reproductive toxicity | | Not data available | |
| Specific target organ toxicity – single exposure | | Not data available | |
| Specific target organ toxicity – repeated exposure | | Not data available | |
| Danger of aspiration | | Not data available | |
| Addition information | | N/A | |
| To the best of our knowledge the chemical, physical and toxicological properties of this natural substance/mixture have not been fully investigated. | | | |
| * + 1. **Endocrine disrupting properties** | | | |
| No data available. | | | |
| * + 1. **Information on other hazards** | | | |
| N/A. | | | |
| 1. Environmental information | | | |
| * 1. **Toxicity** | | | |
| Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. | | | |
| * 1. **Persistence and degradability** | | | |
| Product is biodegradable. | | | |
| * 1. **Bioaccumulation potential** | | | |
| Does not accumulate in organisms. | | | |
| * 1. **Mobility in the ground** | | | |
| No data available. | | | |
| * 1. **Results of the PBT and PvB assessment** | | | |
| PBT: No.  vPvB: No. | | | |
| * 1. **Other adverse effects** | | | |
| No known significant effects or critical hazards. | | | |
| 1. Disposal information | | | |
| * 1. **Procedures for waste treatment** | | | |
| **Methods of disposal:**  Dispose of contents/container in accordance with local, regional, national, and international regulations.  **Packaging:**  Container may remain hazardous when empty. Continue to observe precautions. | | | |
| * 1. **Recommendation** | | | |
| N/A. | | | |
| 1. Transport information | | | |
| * 1. **UN Number** | | | |
| ADR/RID | | | No data available |
| IMDG | | | No data available |
| IATA | | | No data available |
| * 1. **Proper UN shipping name** | | | |
| ADR/RID | | | No data available |
| IMDG | | | No data available |
| IATA | | | No data available |
| * 1. **Transport and hazard classes** | | | |
| ADR/RID | | | Non-hazardous goods |
| IMDG | | | Non-hazardous goods |
| IATA | | | Non-hazardous goods |
| * 1. **Packaging group** | | | |
| ADR/RID | | | No data available |
| IMDG | | | No data available |
| IATA | | | No data available |
| * 1. **Environmental hazards** | | | |
| ADR/RID | | | Non-hazardous goods |
| IMDG Marine Pollutant | | | Non-hazardous goods |
| IATA | | | Non-hazardous goods |
| * 1. **Maritime transport in bulk according to IMO instruments** | | | |
| N/A. | | | |
| 1. Legislation | | | |
| This safety data sheet fulfils the requirements of Regulation (EC) No. 1907/2006. | | | |
| * 1. **Safety, health and environment protection/legislation specific to the substance or mixture** | | | |
| Safety, health and environmental regulations/legislation specific for the substance:  Water hazard class: 1. | | | |
| * 1. **Chemical safety assessment** | | | |
| N/A. | | | |
| 1. Other information | | | |
| To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. | | | |

**Further Information**

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