

Safety Data Sheet



Advanced Nutrients Connoisseur Coco Bloom Part "B" pH-Perfect Base Nutrient

Section 1. Identification

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| GHS product identifier | : Advanced Nutrients Connoisseur Coco Bloom Part "B" pH-Perfect Base Nutrient |
| Other means of identification | : Product Code: 1668 Formula Code: 001A |
| Recommended use of the chemical and restriction on use | : A plant nutrient used to obtain faster growth and larger yields in all kinds of growing media. Not to be used as food or feed in any forms |
| Supplier/Manufacturer's details | : Advanced Nutrients Ltd. 109-31063 Wheel Ave. Abbotsford, BC Canada V2T6H1 Tel: (877) 604-8637 Email: info@advancednutrients.com www.advancednutrients.com |
| Emergency Phone number | : 24 Hour Transportation Emergency Number – CHEMTREC 1-800-424-9300 U.S.A, Canada, International |

Section 2. Hazard Identification

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| GHS classification of the substance/mixture | : Neither the mixture nor its major constituents are listed in (a) the CLP/GHS database (Table 3.1 and 3.2 of Annex VI to CLP) and (b) OSHA Laws & Regulations (29 CFR - 1910 Subpart Z: Table Z-1 to Z-3) as hazardous materials. |
| GHS label elements | |
| Pictogram symbol | : Not applicable. |
| Signal word | : Not applicable. |
| Hazard statement | : Not hazardous. |
| Precautionary statement | |
| General | : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. |
| Prevention | : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. |
| Response | : If skin or eye irritation occurs get medical advice/attention. If in eyes: rinse cautiously with water for several minutes. |
| Storage | : Store in cool and dry place. |

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| Disposal | : Dispose of contents and container in accordance with local, regional, national and international regulations. |
| Other hazards (not covered the GHS) | : Potassium nitrate is used in the manufacture of this product. The US National Fire Protection Association (NFPA) Code 430 (1995) has classified Potassium nitrate as oxidizing material in Class 1, which do not cause spontaneous ignition when it comes in contact with combustible materials. |

Section 3. Composition/Information on Ingredients

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| Substance/Mixture | : Mixture |
| Chemical identity | : Not applicable |
| Common name/synonym | : Not available |
| CAS number and other unique identifiers | : Not applicable |
| Impurities and stabilizing additives | : Not applicable |

| Ingredient name | CAS number | % (w/w) | Classification according to OSHA Law & Regulations |
|------------------------|-------------------|----------------|---|
| Potassium Nitrate | 7757-79-1 | 2-10 | Not classified as hazardous |
| Potassium Sulfate | 7778-80-5 | 1-5 | Not classified as hazardous |
| Urea | 57-13-6 | 1-5 | Not classified as hazardous |

The chemical identity of the remaining ingredients and their exact proportions used in the mixture are a proprietary trade secret (protected by the Confidential Business Information – CBI) and, within the current knowledge of the manufacturer and in the concentration applicable, they are not hazardous to health or the environment.

Section 4. First-aid Measures

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| Description of necessary measures | |
| Self-protection of first-aiders | : Pay attention to self-protection. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| General information | : Remove contaminated clothing immediately. In case of accident or unwellness, seek medical attention immediately. |
| Inhalation | : Move victim to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. |

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| Skin contact | : Wash contaminated skin with plenty of water and soap. Wash contaminated clothing and clean shoes before reuse. Get medical attention if adverse health effects persist or are severe. |
| Eye contact | : Immediately flush eyes with plenty of water with the eyelids open. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if adverse health effects persist or are severe. |
| Ingestion | : If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Most important symptoms/effects, acute and delayed: | |
| Inhalation | : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Skin contact | : Not known health effect due to skin contact. |
| Eye contact | : If in eyes, it causes eye irritation. |
| Ingestion | : If swallowed, it irritates mouth, throat and stomach. |
| Indication of immediate medical attention and special treatment needed: | |
| Notes to physician | : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | : No specific treatment. |
| See also toxicological information (Section 11). | |

Section 5. Fire-fighting Methods

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| Suitable extinguishing media | : Any media suitable for extinguishing a surrounding fire. |
| Unsuitable extinguishing media | : Not known. |
| Specific hazards arising from the chemical | : In a fire, hazardous thermal decomposition products may be produced including nitrogen oxides and metal oxide/oxides. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece |

Special protective precautions for fire-fighters

operated in positive pressure mode.

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Risk of explosion. If large quantities are involved in a major fire, evacuate the area. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fight fire from protected location or maximum possible distance.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency personnel

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and clean up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Do not absorb in

sawdust or other combustible material. It may lead to a fire risk when it dries out. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Section 7. Handling and Storage

Precautions for safe handling

Advice on general hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures : Put on appropriate personal protective equipment. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage and any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from reducing agents and combustible materials. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits : None

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| Biological limit values | : None |
| Appropriate engineering controls | : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |
| Individual protection measures | |
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before breaks and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. |
| Personal Protective Equipment (PPE) | : PPE should be used in conjunction with other control measures, including engineering controls, ventilation and isolation. See Section 5 (Fire-fighting measures) of the SDS for specific fire/chemical PPE advice. |
| Eye/face protection | : Do not get in eyes. Wear chemical safety goggles and a face shield if splashing hazard exists. |
| Skin protection | : Avoid skin contact. Wear gloves when handling the product directly. |
| Respiratory protection | : Not normally required if the product is used as directed. Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. |
| Thermal hazards | : None. |

Section 9. Physical and Chemical Properties

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| Appearance (physical state) | : Clear, lightly yellow transparent liquid. |
| Odor | : Mineral |
| Odor threshold | : Not available |
| pH | : 5.693 |
| Melting point/Freezing point | : Not available |
| Initial boiling point and boiling range | : 100°C (212°F) |

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| Flash point | : Not available |
| Evaporation rate | : Not available |
| Flammability (solid, gas) | : Not available |
| Upper/lower flammability or explosive limits | : Not available |
| Vapor pressure | : Not available |
| Vapor density | : Not available |
| Relative density | : 1.115g/ml |
| Solubility (ies) | : Complete in water |
| Partition coefficient: n-octanol/water | : Not available |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| Viscosity | : Not available |

Section 10. Stability and Reactivity

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| Reactivity | : Not available. |
| Chemical stability | : Normally stable. |
| Possibility of hazardous reactions | : Hazardous reactions or instability may occur under certain conditions of storage or use, such as contact with combustible materials which may result risk of causing or intensifying fire. |
| Conditions to avoid | : Freezing temperatures. |
| Incompatible materials | : Reducing materials, organic materials, metals and acids. |
| Hazardous decomposition products | : None under normal conditions of storage and use. |

Section 11. Toxicological Information

Acute toxicity

| Ingredient | Toxicity | Species | Dose* | Remark |
|-------------------|-----------------|----------------|---------------------------|---------------------|
| Potassium nitrate | Oral LD50 | Rat | >2000 mg/kg bw | No sign of toxicity |
| | Inhalation LC50 | Rat | >0.527 mg/L air | |
| | Dermal LD50 | Rat | >5000 mg/kg bw | |
| Potassium Sulfate | Oral LD50 | Rat | >2000 mg/kg bw | No sign of toxicity |
| | Inhalation LC0 | Rat | 3.6 mg/m ³ air | |
| | Dermal LD50 | Rat | >2000 mg/kg bw | |
| Urea | Oral LD50 | Cow | 600 mg/kg bw | No information |
| | Inhalation LC50 | - | - | No information |
| | Dermal LD50 | - | - | No information |

* - Obtained from ECHA (Updated Nov. 14, 2017)

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| Skin corrosion/irritation | : Not-irritating to the skin (Potassium nitrate, Potassium sulfate and Urea). |
| Serious eye damage/irritation | : Non-irritant (Potassium nitrate and Potassium sulfate) Mildly irritating to eyes (Urea). |
| Respiratory or skin sensitization | : Non skin sanitizer (Potassium nitrate, Urea). |
| Germ cell mutagenicity | : No data available. |
| Carcinogenicity | : No data available. |
| Reproductive toxicity | : No adverse effect (Potassium nitrate and Potassium sulfate), No data available (Urea). |
| STOT-single exposure | : No data available. |
| STOT-repeated exposure | : No data available. |
| Aspiration hazard | : No data available. |
| The Likely routes of exposure, health effects and Symptoms related to the physical, chemical and toxicological characteristics | |
| Eye contact | : If in eyes, it causes eye irritation. The symptoms may include irritation, watering and redness. |
| Inhalation | : There is no known health effect. |
| Skin contact | : There is no known health effect. |
| Ingestion | : It is harmful if ingested. Irritating to mouth, throat and stomach. There is no known health effect. |
| Delayed and immediate effects and also chronic effects from short or long term exposure | |
| Short-term exposure | |
| Potential immediate effects | : Not known. |
| Potential delayed effects | : Not known. |
| Long-term exposure | |
| Potential immediate effects | : Not known. |
| Potential delayed effects | : Not known. |
| Potential Chronic health effect | : Not known. |
| Numerical measures of toxicity | |
| Acute toxicity estimate | |
| Oral | : No data available. |
| Inhalation of vapors | : No data available. |

Section 12. Ecological Information

Toxicity

| Ingredient name | Result | Species | Exposure | Reference |
|-------------------|-------------------------------------|---------------------------------|------------|-----------|
| Potassium nitrate | Acute LC50 490 mg/l Fresh water | Aquatic invertebrate Daphnia | - 48 hours | IUCLID 5 |
| | Acute LC50 1378 mg/L Fresh water | Fish – Poecilia reticulata | 96 hours | ECHA |

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|-------------------|---------------------------------------|-----------------------------------|----------|------|
| Potassium sulfate | Acute LC50 720 mg/l Fresh water | Aquatic invertebrate - Daphnia | 48 hours | ECHA |
| | Acute LC50 680 mg/l Fresh water | Fish- Fathead minnows | 96 hours | ECHA |
| Urea | Acute LC50 > 6810 mg/l Fresh water | Fish – Golden orfe fish | 96 hours | ECHA |

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| Persistence and degradability | : No data available. |
| Bioaccumulative potential | : No data available. |
| Mobility in soil | : No data available. |
| Other adverse effects | : No known significant effect. |

Section 13. Disposal Considerations

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| Disposal of waste methods | : Disposal of all waste must be done in accordance with municipal, provincial and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. No sewage disposal!! |
| Contaminated packaging | : Empty containers should be recycled or disposed of through an approved waste management facility. Persons conducting disposal, recycling or reclamation activities should follow the information in Section 8 of this SDS. |

Section 14. Transport Information

| Identification of ingredients according to UN Model Regulations | |
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| UN number | This product is a mixture of ingredients which are not listed as 'Dangerous Goods' in Chapter 3.2 of UN Recommendations on the Transport of Dangerous Goods and/or one or more ingredients are included in the list but their mixture is exempted from the same Regulation based on the Articles 2.0.2.5 (C), 2.0.2.7 and 3.3.1 No. 208. |
| UN proper shipping name | |
| Transport hazard class(es) | |
| Packing group | |
| Special precaution for user | Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
| Transport in bulk | Not applicable (≤ 1000L-container). |

Environmental hazards

| Ingredient's name | IMDG | UN | ADR | RID | ADN |
|-------------------|------|----|-----|-----|-----|
| Potassium nitrate | No | No | No | No | No |

Section 15. Regulatory Information

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| Safety, health and environmental regulations specific for the product in question | : | Not known. |
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Section 16. Other Information

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| Prepared by | : | Department of Product Development, Advanced Nutrients Ltd., Canada |
| Date of preparation (d/m/y) | : | 14/11/2017 |
| Version | : | 2 |
| Date of Revision | : | 15/04/2020 |
| Revised Sections | : | Section 1 |

Key Acronyms:

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| ADN | : | The European Agreement concerning the International Transport of Dangerous Goods by Inland Waterways |
| ADR | : | The European Agreement concerning the International Carriage of Dangerous Goods by Road |
| BW | : | Body weight |
| IATA | : | International Air Transport Association shipment of Dangerous Goods Regulation |
| IMDG | : | International Maritime Dangerous Goods code |
| RID | : | The Regulation concerning the International Carriage of Dangerous Goods by Rail |
| SDS | : | Safety Data Sheet |

Key Literature References:

Convention concerning International Carriage by Rail (COTIF) Appendix C – Regulation concerning the International Carriage of Dangerous Goods by Rail (RID), with effect from 1 January 2013. Intergovernmental Organisation for International Carriage by Rail (OTIF). Berne, Switzerland, 2012.

European Chemical Agency (ECHA) 2015. Information on Chemicals: Registered substances <http://echa.europa.eu/information-on-chemicals/registered-substances>. Online Database. Accessed on March 16, 2015.

European Agreement concerning the International Transport of Dangerous Goods by Inland Waterways (ADN), including the Annexed Regulations, applicable as from 1 January 2013. Volume I and Volume II. ECE/TRANS/231 (Vol. I & II). UN Economic Commission for Europe-Committee on Inland Transport. New York and Geneva, 2012.

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), applicable as from 1 January 2013. Volume I and Volume II. ECE/TRANS/225 (Vol. I & II). United Nations Economic Commission for Europe-Committee on Inland Transport, New York and Geneva, 2012.

Globally Harmonized System of Classification and Labelling of Chemicals. 5th Edition. ST/SG/AC. 10.30/Rev. 5. United Nations, New York and Geneva, 2013.

Guidance on Labelling and Packaging Regulation in Accordance with EU Regulation 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation). European Chemical Agency, Finland, 2011.

International Maritime Dangerous Goods (IMDG) Code Volume 1 and 2. Incorporating Amendment 33-06, 2006 Edition. International Maritime Organization. London, 2006.

OSH Answers Fact Sheets. Canadian Centre for Occupational Health and Safety. http://www.ccohs.ca/oshanswers/chemicals/oxidizing/oxidizing_hazards.html
Accessed on April 08, 2015.

OSHA Law and Regulations. Occupational Safety and Health Standards 29 CFR: 1910. <https://www.osha.gov/law-regs.html> Accessed on April 15, 2015.

Recommendations on the Transport of Dangerous Goods – Manual of Test and Criteria. 5th Edition. ST/SG/AC. 10/11/Rev. 5. United Nations, New York and Geneva, 2009.

Recommendations on the Transport of Dangerous Goods – Model Regulations. 18th Edition. Volume I and II. ST/SG/AC. 10/1/Rev. 18. UN, New York and Geneva, 2013.

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Official Journal of the European Union L 353/1. 2008.

Others : The data here is for hazard communication to our employees, our customers and their employees and authorized regulatory agencies. For the intended purpose, this SDS may be duplicated or the data transcribed to an alternative form.

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