



THE 2HR AQUARIST

## SAFETY DATA SHEET

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: APT Start  
OTHER NAMES: APT Start  
PRODUCT USE: Mineral supplement for ornamental aquariums

#### SUPPLIER DETAILS

COMPANY NAME: 2Hr Aquarist Pte. Ltd.  
ADDRESS: 22 Sin Ming Lane, #06-76, Midview City  
Singapore 573969  
  
TEL: +65 69668045  
EMERGENCY TEL: +65 69668045  
  
DATE OF PREPARATION: 18<sup>th</sup> Nov 2022  
LATEST REVISION: 18<sup>th</sup> Nov 2022

### SECTION 2: HAZARDS IDENTIFICATION

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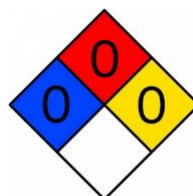
Under the criteria of the USA Federal OSHA Hazard Communication Standard 29CFR 1910.1200, and Regulation (EC) No 1272/2008 (GHS):

THIS MATERIAL IS NOT HAZARDOUS

Label elements: NO MEASURES REQUIRED

#### USA NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS

Health (Blue): 0 – Minimal  
Flammability (Red): 0 – Minimal  
Instability (Yellow): 0 – Minimal  
Other (White): None



## USA HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health Hazard (Blue): 0 – Minimal  
Flammability Hazard (Red): 0 – Minimal  
Physical Hazard (Orange): 0 – Minimal  
Protective Equipment: See section 8

|                     |   |
|---------------------|---|
| HEALTH              | 0 |
| FLAMMABILITY        | 0 |
| PHYSICAL HAZARD     | 0 |
| PERSONAL PROTECTION | 0 |

This product is NOT HAZARDOUS as defined by (1) the U.S. Department of Transportation (49 CFR 172.101), (2) per regulations of Transport Canada, (3) per the International Air Transport Association, (4) per rules of the International Maritime Organization, (5) per the Economic Commission for Europe (European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)). Additionally, this product is NOT classified as a Marine Pollutant as defined by 49 CFR 172.101 Appendix B, U.S. Department of Transportation).

### SECTION 3: COMPOSITION INFORMATION

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| Components       | CAS # | EC # | Wt % |
|------------------|-------|------|------|
| Clay             | *     | *    | *    |
| Bacteria culture | *     | *    | *    |
| Salts*           | *     | *    | *    |

\*Proprietary mixture of salts. The identity and weight of proprietary, non-hazardous, main ingredients are withheld as a trade secret. Other ingredients are present in amounts less than 1% and are non-hazardous.

### SECTION 4: FIRST AID MEASURES

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**INGESTION:** Rinse mouth with water and drink a glass of water. Further First aid not generally required. If in doubt, contact a poison information center or a doctor.

**EYE CONTACT:** Immediately flush eyes thoroughly with water for 5-10 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**SKIN CONTACT:** Wash with soap and plenty of and water.

**INHALATION:** In case of inhalation of dust, remove victim to fresh air and keep at rest and warm. If victim feels unwell, call a doctor or physician.

**RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically. First aid responders should wear suitable protective equipment for eyes, skin, and protective mask depending on the situation.

### SECTION 5: FIRE FIGHTING MEASURES

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|   |                            |
|---|----------------------------|
| FIRE EXTINGUISHING MATERIALS:           | Material is non-Flammable. |
| FLASH POINT:                            | None                       |
| AUTOIGNITION TEMPERATURE:               | Not Applicable             |
| FLAMMABLE LIMITS (in air by volume, %): | Not Applicable             |
| Lower Explosive Limit (LEL):            | Not Applicable             |
| Upper Explosive Limit (UEL):            | Not Applicable             |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**SMALL SPILLS:** Sweep up and discard contents.

## SECTION 7: HANDLING & STORAGE

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**WORK PRACTICES AND HYGIENE PRACTICES:** Install or use appropriate equipment and wear suitable protective apparatus described in Section 8. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Launder contaminated clothing before reuse.

**STORAGE AND HANDLING PRACTICES:** Store material in original containers. Store in a cool, dry area protected from environmental extremes. Keep away from water moisture until used. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks.

## SECTION 8: EXPOSURE CONTROLS-PERSONAL PROTECTION

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**VENTILATION AND ENGINEERING CONTROLS:** Use adequate ventilation to ensure exposure levels are maintained below the limits provided below. Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

### EXPOSURE LIMITS/GUIDELINES:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states, and those of Japan. Please reference applicable regulations and standards for relevant details.

### RESPIRATORY PROTECTION:

Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN 529:2005, or EU member states. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998) or the regulations of various U.S. States, Canada, EU Member States, or those of Japan.

Air-purifying respirators with dust/mist/fume filters are recommended if operations may involve prolonged exposures to mists or sprays from this product.

**EYE PROTECTION:**

Not necessary in normal handling. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian CSA Standard Z94.3-M1982, Industrial Eye and Face Protectors, or relevant European Standards, Australian Standards, or Japanese Standards.

**HAND PROTECTION:**

Not necessary in normal handling. If necessary, refer to U.S. OSHA 29 CFR 1910.138, or relevant European, Canadian, Australian or Japanese Standards.

**BODY PROTECTION:**

Not necessary in normal handling. If necessary, refer to appropriate Standards of Canada, the European Union, Australia, or Japan.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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|                          |                |
|--------------------------|----------------|
| APPEARANCE & COLOUR:     | Brown powder   |
| ODOUR:                   | None           |
| SOLUBILITY:              | Partly soluble |
| SPECIFIC GRAVITY         | Not applicable |
| pH:                      | Not applicable |
| FREEZING POINT           | Not applicable |
| BOILING POINT            | Not applicable |
| FLASH POINT              | NONE           |
| FLAMMABILITY             | Not Flammable  |
| VAPOUR PRESSURE at 20 °C | Not applicable |
| VAPOUR DENSITY           | Not applicable |

## SECTION 10: STABILITY and REACTIVITY

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**REACTIVITY:** This product is non-reactive under normal conditions of use.

**CHEMICAL STABILITY:** This product is stable under normal conditions of use.

**HAZARDOUS REACTIONS:** Will not occur.

**CONDITIONS TO AVOID:** Avoid water and moisture in storage.

**INCOMPATIBLE MATERIALS:** Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition products can include and are not limited to: Carbon dioxide, Alcohols, Ethers, Hydrocarbons, Polymer fragments.

## SECTION 11: TOXICOLOGICAL INFORMATION

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Acute Toxicity Estimates (ATE) are calculated according to US OSHA Hazard Communication Standard 29CFR 1910.1200. The calculation is based on specific toxicology data for components present in concentrations greater than 1%.

#### ACUTE TOXICITY

Acute oral toxicity: The calculated ATE (mix) for this product is > 8,000. Product has negligible toxicity if swallowed.

Acute dermal toxicity: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Acute inhalation toxicity: No adverse effects are anticipated from inhalation.

#### SKIN CORROSION/IRRITATION

Essentially non-irritating to skin.

#### SERIOUS EYE DAMAGE/EYE IRRITATION

May cause eye irritation. Corneal injury is unlikely.

#### SENSITIZATION

The components of this product are not known to be human skin or respiratory sensitizers.

#### SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

#### CARCINOGENICITY

The components of this product are not listed by U.S. FEDERAL OSHA, NTP, IARC, and CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

#### TERATOGENICITY

The components of this product are not reported to produce teratogenic effects in humans.

#### REPRODUCTIVE TOXICITY

The components of this product are not reported to cause reproductive effects in humans.

#### MUTAGENICITY

The components of this product are not reported to produce mutagenic effects in humans.

#### ASPIRATION HAZARD

Based on physical properties, not likely to be an aspiration hazard.

### SECTION 12: ECOLOGICAL INFORMATION

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TOXICITY: This product will biodegrade fully in the environment.

EFFECT OF MATERIAL ON PLANTS OR ANIMALS: This product is not expected to cause harm to plants or animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: Will not harm aquatic life.

### SECTION 13: DISPOSAL CONSIDERATIONS

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#### PREPARING WASTES FOR DISPOSAL:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, EU Member States, Australia, and Japan. When disposing, consult a certified waste trader or local office if they deal with the waste. The used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations. Contents should be removed completely when disposing of empty containers.

U.S. EPA WASTE NUMBER: Not applicable for wastes of this product.

EUROPEAN UNION EWC CODE: Waste from this product is NOT considered as a hazardous waste pursuant to the relevant EEC Directive on hazardous waste, and is NOT subject to the provisions of that directive.

#### SECTION 14: TRANSPORT INFORMATION

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This product is NOT hazardous as defined by (1) the U.S. Department of Transportation (49 CFR 172.101), (2) per regulations of Transport Canada, (3) per the International Air Transport Association, (4) per rules of the International Maritime Organization, (5) per the Economic Commission for Europe (European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)). Additionally, this product is NOT classified as a Marine Pollutant as defined by 49 CFR 172.101 Appendix B, U.S. Department of Transportation).

This product is NOT dangerous as defined by the United Nations' Recommendations on the Transport of Dangerous Goods (UNRTDG).

When transporting, confirm no leakage from containers. When loading, prevent containers from failing, dropping or damaging. Take preventative measures against collapse.

#### SECTION 15: REGULATORY INFORMATION

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##### ADDITIONAL UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The component of this product is NOT subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: The component of this product has no specific Threshold Planning Quantity. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 pounds (4540 kg) therefore applies, per 40 CFR 370.20.

U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

U.S. TSCA INVENTORY STATUS: The component of this product is listed on the TSCA Inventory. U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable

##### OTHER U.S. FEDERAL REGULATIONS:

- The component of this product is not subject to the reporting requirements of CFR 29 1910.1000.
- The component of this product is not subject to the reporting requirements of Section

112® of the Clean Air Act.

- The component of this product is not a Class I or Class II ozone depleting chemical (40 CFR part 82).
- The component of this product is not listed under Table 1 as Regulated Substances, per 40 CFR, Part 68, of the Risk Management for Chemical Release Prevention.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT**  
(PROPOSITION 65): The component of this product is not on the California Proposition 65 Lists.

**ADDITIONAL CANADIAN REGULATIONS:**

**CANADIAN DSL/NDL INVENTORY STATUS:** The component of this product is included in the DSL Inventory.

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:** The component of this product is not on the CEPA Priorities Substances Lists.

**CANADIAN WHMIS CLASSIFICATION:** This product does not meet the criteria to be classified as a Controlled Product.

**CANADIAN WHMIS SYMBOLS:** Not applicable.

**ADDITIONAL EUROPEAN UNION REGULATIONS:**

**EU LABELING/CLASSIFICATION:** This product does not meet the definition of hazardous as defined by European Economic Community Guidelines.

**EU CLASSIFICATION:** Not applicable.

**EU RISK PHRASES:** R 36 (irritating to eyes); R 37 (irritating to respiratory system) EU

**SAFETY PHRASES:** S 22 (do not breathe dust); S 25 (avoid contact with eyes)

**EUROPEAN COMMUNITY ANNEX II HAZARD SYMBOL:** Not applicable

**EUROPEAN UNION CLASSIFICATION ON COMPONENTS:**

**CARBON:** A classification by the European Union Directives has not yet been published for this compound.

## SECTION 16: OTHER INFORMATION

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This Safety Data Sheet is offered pursuant to USA OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of the 2Hr Aquarist Pte. Ltd.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time.

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## ABBREVIATIONS AND DEFINITIONS

|                             |  |
|-----------------------------|--|
| ACGIH                       | American Conference of Governmental Industrial Hygienists  |
| ADR                         | The European Agreement Concerning the International Carriage of Dangerous Goods by Road (Economic Commission for Europe)   |
| Autoignition Temperature    | Minimum temperature required to initiate combustion in air with no other source of ignition.   |
| Biological Exposure Indices | Reference values intended as guidelines for the evaluation of potential health hazards in the practice of industrial hygiene, published by the ACGIH. BEIs represent the levels of determinants that are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. |
| CAL/ OSHA                   | The Division of Occupational Safety and Health for the State of California.  |
| CAS#                        | The Chemical Abstract Service Number that uniquely identifies each constituent.  |
| CEPA                        | Canadian Environmental Protection Act  |
| CERCLA                      | The United States Comprehensive Environmental Response, Compensation, and Liability Act, sometimes known as the Superfund Act  |
| CFR                         | The US Code of Federal Regulations   |
| CSA                         | The Canadian Standards Association   |
| DOT                         | The United States Department of Transportation   |
| DSL / NDSL                  | The Canadian Domestic/Non-Domestic Substances List   |
| EC #                        | Sometimes known as the EINECS # (European Inventory of Now-Existing Chemical Substances), which uniquely identifies each constituent.  |
| Embryotoxin                 | A chemical that causes damage to a developing embryo (i.e., within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines.   |
| EN                          | European standards for products and services by European Committee for Standardization (Comité Européen de Normalisation).   |
| EPA                         | The United States Environmental Protection Agency.   |
| EPA Waste Number            | A code developed by the EPA to identify characteristics of hazardous waste (e.g., ignitability, corrosivity, reactivity, etc.)   |
| EU                          | European Union   |
| EWC                         | European Waste Catalogue, a publication of the European Union, which catalogs hazardous chemical wastes.   |
| Flash Point                 | Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable product with air.   |
| HMIS                        | Hazardous Materials Identification System, a rating system developed by the National Paint and Coating Association that has been adopted by industry to identify the degree of chemical hazards.   |
| IARC                        | International Agency for Research on Cancer, an agency of the World Health Organization.   |

|                    |  |
|--------------------|--|
| LEL                | Lower Explosive Limit, the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.   |
| IDLH               | Immediately Dangerous to Life and Health. This level represents a concentration from which one can escape within 30 minutes without suffering escape-preventing or permanent injury.   |
| Mutagen            | A chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines.  |
| NFPA               | National Fire Protection Association, which has established a rating system for chemical hazards.  |
| NIOSH              | National Institute for Occupational Safety and Health, a Federal research agency focusing on occupational safety and health.   |
| NTP                | National Toxicology Program, an agency of the Federal Department of Health and Human Services.   |
| OSHA               | Occupational Safety and Health Administration, an agency of the United States Department of Labor.   |
| PEL                | Permissible Exposure Limit. This has the exact same meaning as TLV, except that it is enforceable by OSHA.   |
| REL                | Recommended Exposure Limit. This has the same meaning as TLV, but is a recommendation by NIOSH.  |
| Reproductive Toxin | Any substance which interferes in any way with the reproductive process.   |
| RID                | International Regulations Concerning the Carriage of Dangerous Goods by Rail   |
| SARA               | Superfund Amendments and Reauthorization Act   |
| SCBA               | Self-Contained Breathing Apparatus   |
| STEL               | This is the 15-minute Short Term Exposure Limit reported under Threshold Limit Value and OSHA's Permissible Exposure Limit.  |
| TC                 | Transport Canada   |
| Teratogen          | A chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines.  |
| TLV                | Threshold Limit Value, the airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must also be considered. See the definitions of TWA and STEL. |
| TSCA               | The United States Toxic Substances Control Act   |
| TWA                | This is the 8-hour Time Weighted Average reported under Threshold Limit Value and OSHA's Permissible Exposure Limit.   |
| UEL                | Upper Explosive Limit, the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.  |
| WHMIS              | Canadian Workplace Hazardous Materials Information System  |