

* 1 Identification

- **Product identifier**
- **Trade name: Orca**
- **Product description:** Naturally occurring beneficial soil microorganism.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Plant Revolution, Inc.
412 Goetz Ave
Santa Ana, CA 92707
Ph: 714-545-5335
Fax: 714-545-5429
<http://www.plant-success.com/>
- **Emergency telephone number:** Josh Eagan 714-415-9290

* 2 Hazard(s) identification

- **Classification of the substance or mixture**
- * Product is in liquid form and only poses a respirable hazard when in dry state. See Below



May cause respiratory irritation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
Attapulgite (Palygorskite) (fibrous dust)
- **Hazard statements**
May cause respiratory irritation.
- **Precautionary statements**
Wear respiratory protection.
Use only outdoors or in a well-ventilated area.
Use personal protective equipment as required.
Do not handle until all safety precautions have been read and understood.

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Reviewed on 02/20/2021

Trade name: Orca

(Contd. of page 1)

Do not breathe dust.
 Avoid breathing dust.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF exposed or concerned: Get medical advice/attention.
 Get medical advice/attention if you feel unwell.
 Call a POISON CENTER/doctor if you feel unwell.
 Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures** Mycorrhizae species of fungi
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components: N/A**

12174-11-7	Attapulгите (Palygorskite) (fibrous dust) ⚠	90-99%
------------	---	--------

* 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
- **After skin contact:**
 Wash with soap and water. Then apply hand lotion.
 Exposure to skin may cause mild irritation and dry skin.
- **After eye contact:**
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Give large amounts of water. If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

* 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)

Trade name: Orca

(Contd. of page 2)

- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Protective respiratory device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Avoid constant temperature above 120°F or it destroys the product.
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

* **Components with limit values that require monitoring at the workplace:** N/A

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Dust mask
- **Protection of hands:**
Exposure to skin may cause mild irritation and dry skin.
After each cleaning use treatment creams, for very dry skin greasy ointments.

(Contd. on page 4)

Trade name: Orca

(Contd. of page 3)

- **Material of gloves** Not required under conditions of normal use.
- **Penetration time of glove material** Not applicable.
- **Eye protection:**
Non toxic but dust may irritate eyes. Flush eyes with clean water. Consult a physician if irritation persists.

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - **Form:** Liquid
 - **Color:** Pale, Opaque, milky
 - **Odor:** Earthy Musty
 - **Odor threshold:** Not determined.
 - **pH-value:** Not applicable.
- **Change in condition**
 - **Melting point/Melting range:** 100 °C (212 °F)
 - **Boiling point/Boiling range:** 100 °C (212 °F)
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Ignition temperature:**
 - **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Vapor pressure:** Not applicable.
- **Density @ 20 °C (68 °F):** 2.2 g/cm³ (18.359 lbs/gal)
- **Relative density** Not determined.
- **Vapor density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with**
 - **Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not applicable.
 - **Kinematic:** Not applicable.
- **Solvent content:**
 - **Organic solvents:** 0.0 %
 - **Solids content:** 1.0 %
- **Other information** No further relevant information available.

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Reviewed on 02/22/2021

Trade name: Orca

(Contd. of page 4)

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

12174-11-7	Attapulgit (Palygorskite) (fibrous dust)	2B
------------	--	----

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

* 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** None known
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** No further relevant information available
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

(Contd. on page 6)

Trade name: Orca

(Contd. of page 5)

* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Recycle or dipose with household trash.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Reviewed on 02/22/2021

Trade name: Orca

(Contd. of page 6)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Attapulгите (Palygorskite) (fibrous dust)

· **Hazard statements**

May cause respiratory irritation.

· **Precautionary statements**

Wear respiratory protection.

Use only outdoors or in a well-ventilated area.

Use personal protective equipment as required.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Avoid breathing dust.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Call a POISON CENTER/doctor if you feel unwell.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **State Right to Know**

12174-11-7 Attapulгите (Palygorskite) (fibrous dust)

90-99%

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom 2012 Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Reviewed on 02/22/2021

Trade name: Orca

(Contd. of page 7)

Mycorrhizae species of fungi	≤ 2.5%
All ingredients are listed.	

· **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 02/22/2021

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Carc. 1A: Carcinogenicity, Hazard Category 1A

Carc. 2: Carcinogenicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2