FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:
1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

## PRODUCT NAME: APPLIED BIOCHEMISTS REMOVIT

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier
Applied Biochemists 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 USA

Telephone: +17705215999
Telefax: +17705215999
Web: www.poolspacare.com
Manufacturer
Advantis Technologies
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

REVISION DATE: 05/26/2015
SUPERCEDES:
04/16/2001

MSDS Number: 000000024387
SYNONYMS
CHEMICAL FAMILY: None
DESCRIPTION / USE None established
FORMULA: None established

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

Eye irritation

GHS Label element
Hazard pictograms

Signal word
Hazard statements
: Category 2A

: Warning
: H319 Causes serious eye irritation.
: Prevention:
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P402 + P404 Store in a dry place. Store in a closed container. P410 + P403 Protect from sunlight. Store in a well-ventilated place.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

## Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS OR CHEMICAL NAME | CAS\# | $\frac{\% \text { RANGE }}{55-65}$ |
| :--- | :--- | :--- |
|  | $7647-14-5$ | $30-40$ |
| Citric Acid | $77-92-9$ | $2-8$ |

## SECTION 4. FIRST AID MEASURES

Inhalation:
Skin Contact:
Eye Contact:
Ingestion

IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
IF ON SKIN: Flush skin with water for 15 minutes. Call a physician if irritation develops.
IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

## SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

## Flammable Properties

Fire / Explosion Hazards:
Extinguishing Media:
Fire Fighting Instructions:

Material will not ignite or burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:

Spill Mitigation Procedures
Air Release:
Water Release:

Land Release:
Additional Spill Information :

No extra protection required beyond that listed in Section 8. In case of fire, use normal fire fighting equipment.

Keep people away from and upwind of spill/leak.
If the product contaminates rivers and lakes or drains inform respective authorities.
Sweep up and shovel into suitable containers for disposal.Avoid creating dust.
Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

## SECTION 7. HANDLING AND STORAGE

Handling:
Storage:
Incompatible Materials for Storage:
Empty Container Warning:

Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust.
Store in a cool, dry and well ventilated place. Isolate from incompatible materials.
Refer to Section 10, "Incompatible Materials."
Empty containers retain hazardous residue, dispose of accordingly.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Additional ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product.<br>\section*{Protective Equipment for Routine Use of Product}

Respiratory Protection : Respiratory protection not normally needed.
Skin Protection : Avoid contact with skin. Impervious gloves
Eye Protection:
Protective Clothing Type:
General Protective Use safety glasses with side shields. Impervious Ensure that eyewash stations and safety showers are close to the Measures: workstation location.

## Components with workplace control parameters

no data available

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | solid |
| :---: | :---: |
| Form | No data. |
| Color: | white |
| Odor: | mild |
| Molecular Weight: | None established |
| pH : | 1.8 |
|  | () $50 \mathrm{~g} / \mathrm{l}$ (as aqueous solution) |
| Boiling Point: | Not applicable |
| Melting point/freezing point | $307{ }^{\circ} \mathrm{F}\left(153{ }^{\circ} \mathrm{C}\right)$ |
| Density | no data available |
| Bulk Density: | $650-950 \mathrm{~kg} / \mathrm{m} 3$ |
|  |  |
| Vapor Pressure: | Not applicable |
| Vapor Density: | Not applicable |
| Viscosity: | no data available |
| Solubility in Water: | $576 \mathrm{~g} / \mathrm{l}$ |
| Partition coefficient n octanol/water: | Not applicable |
| Evaporation Rate: | no data available |
| Oxidizing: | None established |
| Volatiles, \% by vol.: | no data available |
| VOC Content | no data available This product does not contain any chemicals |
|  | listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate |
|  | or Final VOC's (40 CFR 60.489). This product does not contain any |
|  | VOC exemptions listed under the U.S. Clean Air Act Section 450. |
| HAP Content | Not applicable |

## SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Conditions to Avoid: Chemical Incompatibility: Hazardous Decomposition Products: Decomposition Temperature:

Stable under normal conditions.
Heat
Oxidizing agents, Bases
No hazardous decomposition products are known.
No data

## SECTION 11. TOXICOLOGICAL INFORMATION

## Component Animal Toxicology

## Oral LD50 value:

| SODIUM CHLORIDE | LD50 | $=3,000 \mathrm{mg} / \mathrm{kg}$ | Rat |
| :--- | :--- | :--- | :--- |
| Citric Acid | LD50 | $=3,000 \mathrm{mg} / \mathrm{kg}$ | Rat |
| Hexametaphosphate | LD50 | $=3,053 \mathrm{mg} / \mathrm{kg}$ | Rat |

## Component Animal Toxicology

Dermal LD50 value:
SODIUM CHLORIDE LD50 > 10,000 mg/kg Rabbit
Citric Acid LD50 Believed to be > 2,000 mg/kg Rabbit
Hexametaphosphate no data available

Component Animal Toxicology
Inhalation LC50 value:
SODIUM CHLORIDE Inhalation LC50 $1 \mathrm{~h}>42 \mathrm{mg} / \mathrm{Rat}$
Citric Acid no data available
Hexametaphosphate LC50 4 h > $3.69 \mathrm{mg} / \mathrm{Rat}$

## Product Animal Toxicity

Oral LD50 value: $\quad$ Believed to be $>3,000 \mathrm{mg} / \mathrm{kg}$
Dermal LD50 value: Inhalation LC50

Believed to be > 2,000 mg/kg
value:
Skin Irritation: No data.

May cause mild skin irritation.
Eye Irritation: Contact may cause moderate irritation consisting of transient redness, swelling, and mucous membrane discharge to the conjunctiva.
Skin Sensitization: Not expected to be a skin sensitizer.
Subchronic / Chronic There are no known or reported effects from chronic exposure.
Toxicity:
Reproductive and Not known or reported to cause reproductive or developmental toxicity.

Developmental Toxicity:
Citric Acid

Mutagenicity:
Citric Acid

Carcinogenicity:
Citric Acid
This chemical has been tested in laboratory animals and there was no evidence of reproductive toxicity or teratogenicity.

Not known or reported to be mutagenic.
This product was determined to be non-mutagenic in the Ames assay. It was also shown to be negative in the Dominant lethal assay.

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.

## SECTION 12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

## Ecological Toxicity Values for: Citric Acid

Lepomis macrochirus (Bluegill - (static). 96 h LC50 $=1,516 \mathrm{mg} / \mathrm{l}$ sunfish)
Daphnia magna (Water flea) - 72 h EC50Approximately 120 mg/l

## SECTION 13. DISPOSAL CONSIDERATIONS

> CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary :

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

## SECTION 14. TRANSPORT INFORMATION

## DOT

Not dangerous goods

TDG
Not dangerous goods
IATA
Not dangerous goods
IMDG-CODE
Not dangerous goods

## SECTION 15. REGULATORY INFORMATION

## EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

## Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

## US State Regulations

## Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know

Sodium chloride 7647-14-5

Citric acid 77-92-9
polyphosphoric acids, 68915-31-1
sodium salts

## New Jersey Right To Know

Sodium chloride
Citric acid polyphosphoric acids, sodium salts

7647-14-5
77-92-9
68915-31-1

## California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:
TSCA
: The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

## Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

## SECTION 16. OTHER INFORMATION

SECTIONS REVISED: First formulated version in SAP.
Major References :
Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .

