

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE
USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE
USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE
USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Activate**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier
Rendezvous
1400 Bluegrass Lakes Parkway ,
Alpharetta, GA, 30004
United States

Telephone: +17705215999
Telefax: +17705215959
Web: www.poolspace.com

REVISION DATE: 07/09/2013
SUPERCEDES: 07/30/2012

MSDS Number: 000000012595
SYNONYMS: Potassium peroxymonosulfate
CHEMICAL FAMILY: None
DESCRIPTION / USE: Water treatment chemical
FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Corrosive to eyes, Corrosive to skin, Oxidizer, Respiratory irritant.
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Routes of Entry: Eyes Skin Inhalation Ingestion
Chemical Interactions: No known interactions
Medical Conditions Aggravated: Asthma, respiratory and cardiovascular disease, Skin diseases including eczema and sensitization

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Sensitization: Possible skin sensitizer based on animal tests
Chronic Target Organ Toxicity: Respiratory Tract, Eyes, Skin, Digestive Tract
Supplemental Health Hazard No additional health information available.
Information :

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	
POTASSIUM PEROXYDISULFATE	7727-21-1	
Tetra[carbonato(2-)]dihydroxypentamagnesium	7760-50-1	

Active Ingredient in this composition is POTASSIUM PEROXYMONOSULFATE, CAS. No. 10058-23-8, Concentration: 43-47% (Typical 45%)

4. FIRST AID MEASURES

General Advice: Call a physician immediately.

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

Skin Contact: IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention.

Eye Contact: IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.

Ingestion: IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
<u>Flammable Properties</u>	
Flash Point:	not applicable
Autoignition Temperature:	not applicable
Fire / Explosion Hazards:	Material will not ignite or burn. Will release oxygen when heated, intensifying a fire
Extinguishing Media:	Water only.
Fire Fighting Instructions:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8. Use water to cool containers.
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide
Upper Flammable / Explosive Limit, % in air:	not applicable
Lower Flammable / Explosive Limit, % in air:	not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.
<u>Spill Mitigation Procedures</u>	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.
Land Release:	Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Do not place spill materials back in their original containers.
Additional Spill Information :	Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid inhalation of dust and fumes.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

Empty Container Warning: Empty containers retain hazardous residue, dispose of accordingly.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible., Wear a NIOSH approved N95 respirator.

Skin Protection : Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body.

Eye Protection: Use chemical goggles.

Protective Clothing Type: Neoprene

General Protective Measures: An eye wash and safety shower should be provided in the immediate work area.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
POTASSIUM PEROXYDISULFATE	7727-21-1	ACGIH	0.1 mg/m ³ TWA 1996 Adoption

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid
Form: solid
Color: white
Odor: None

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Molecular Weight:	None established
Specific Gravity :	1.1 - 1.4
pH :	1.4 10% solution
Boiling Point:	not applicable
Freezing Point:	not applicable
Melting Point:	not applicable
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	not applicable
Vapor Density:	no data available
Viscosity:	no data available
Solubility in Water:	250 g/l 20 °C
Partition coefficient n-octanol/water:	no data available
Evaporation Rate:	not applicable
Oxidizing:	Product has oxidizing properties.
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Contact with incompatible substances
Chemical Incompatibility:	Halides, Heavy metals, Cyanides, Oxidizing agents
Hazardous Decomposition Products:	Decomposes when heated or dampened, releasing oxygen and heat, Oxides of sulfur
Decomposition Temperature:	no data available

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Pentapotassium LD50 500 mg/kg Rat

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bis(peroxymonosulphate)
bis(sulphate)

Component Animal Toxicology

Dermal LD50 value:

Pentapotassium LD50 > 2,000 mg/kg Rat
bis(peroxymonosulphate)
bis(sulphate)

Product Animal Toxicity

Oral LD50 value: LD50 = 2,000 mg/kg rat
Dermal LD50 value: LD50 > 11,000 mg/kg rabbit
Inhalation LC50
value: LC50 4 h > 5.0 mg/l rat

Skin Irritation: Corrosive to skin
Eye Irritation: Corrosive to eyes
Skin Sensitization: Possible skin sensitizer based on animal tests

Acute Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.

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

12. ECOLOGICAL INFORMATION

Overview: Moderately toxic to fish and other aquatic organisms.

Ecological Toxicity Values - Product:

Oncorhynchus mykiss (rainbow trout) - 96 h LC50 = 53 mg/l
Daphnia magna (Water flea) - 48 h EC50= 3.5 mg/l

Ecological Toxicity Values for: **POTASSIUM PEROXYDISULFATE**

Cyprinus carpio (Carp)	-	48 h LC50 = 1,360 mg/l
Oncorhynchus mykiss (rainbow trout)	-	48 h LC50 = 234 mg/l
Poecilia reticulata (guppy)	-	48 h LC50 = 845 mg/l
Daphnia magna (Water flea)	-	48 h LC50= 92 mg/l

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 will be a nonhazardous waste.

Disposal Methods : As a nonhazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
(MONOPERSULFATE COMPOUND) 8 II

Water (IMDG): UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.,
(MONOPERSULFATE COMPOUND) 8 II

Air (IATA): UN3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.,
(MONOPERSULFATE COMPOUND) 8 II

Emergency Response Guide Number: ERG # 154

Transportation Notes: Under specific circumstances, this product can ship under two transport exceptions, Limited Quantity or Consumer Commodity. See Bill of Lading for proper shipping description.

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.
 EPA Pesticide Registration Number: None established
 FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard
 Physical Fire Hazard

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established
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Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111	None established
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Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSPA_RTK

Pennsylvania: Hazardous substance list
1989-08-11

PEROXYDISULFURIC ACID ([[HO)S(O)2]2O2), DIPOTASSIUM SALT

New Jersey:

CAS #	COMPONENT NAME
546-93-0	MAGNESIUM CARBONATE
7646-93-7	POTASSIUM BISULFATE
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSNJ_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)
2007-03-01

MAGNESITE CARBONIC ACID, MAGNESIUM SALT (1:1)

New Jersey Right to Know Hazardous Substance List (RTK-HSL)
2007-03-01

POTASSIUM HYDROGEN SULFATE POTASSIUM BISULFATE SULFURIC ACID,
MONOPOTASSIUM SALT
Special Health Hazard - Corrosive

New Jersey Right to Know Hazardous Substance List (RTK-HSL)
2007-03-01

POTASSIUM PERSULFATE PEROXYDISULFURIC ACID, ([[HO)S(O)2]2O2),
DIPOTASSIUM SALT

Massachusetts:

CAS #	COMPONENT NAME
546-93-0	MAGNESIUM CARBONATE
7727-21-1	POTASSIUM PEROXYDISULFATE

ZUSMA_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1991-07-01

MAGNESITE DUST

massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1993-04-24

POTASSIUM PERSULFATE

California Proposition 65:

CAS #	COMPONENT NAME
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ZUSCA_P65

None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)

2007-08-24

Threshold limits: 1 Weight percent

1513

Potassium hydrogen sulfate

Ingredient Disclosure List (WHMIS)

1988-01-20

Threshold limits: 0.1 Weight percent

1252

PERSULFATE COMPOUNDS

16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED: 2, 3, 8, 11

Major References : Available upon request.

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MATERIAL SAFETY DATA SHEET

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. .

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Protect Plus**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 04/11/2011 SUPERCEDES: 10/22/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012544 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Mild eye irritant, Mild skin irritant, Possible cancer hazard
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Routes of Entry:	Skin, eyes, ingestion
Chemical Interactions:	None known.
Medical Conditions Aggravated:	None known.

Human Threshold Response Data

Odor Threshold Not established for product.

Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	1	0	0	
NFPA	1	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be an inhalation hazard at ambient conditions. Inhalation of mist or vapor may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.

Skin Toxicity: May cause skin irritation. Not expected to be toxic from dermal contact.

Eye Toxicity: May cause eye irritation. No corneal involvement or visual impairment is expected.

Ingestion Toxicity: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Not expected to be toxic by ingestion.

Acute Target Organ Toxicity: May cause mild skin and eye irritation. Ingestion may cause mild gastrointestinal discomfort., Inhalation of mist or vapor may cause irritation to the mucous membranes of the respiratory tract.

Prolonged (Chronic) Health Effects

Carcinogenicity: The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 2B substance, Possibly Carcinogenic to Humans.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic Target Organ Toxicity: There are no known or reported target organ effects from chronic exposure.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
GLYCINE, N- (2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt	139-89-9	
Citric Acid	77-92-9	
Sodium carbonate	497-19-8	
Trisodium nitrilotriacetate	5064-31-3	

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
Skin Contact:	IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.
Ingestion:	IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards: Will not burn
Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions: 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.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:

Vapors may be suppressed by the use of water fog.

Water Release:

This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Land Release:

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). After removal, flush contaminated area thoroughly with water. Avoid runoff into storm sewers and ditches which lead to waterways.

Additional Spill Information :

Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapors, mist or gas.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials. Do not freeze.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed., If vapors, mists or aerosols are generated, wear a NIOSH approved respirator., A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Impervious gloves

Eye Protection: Safety glasses with side-shields

Protective Clothing Type: impervious clothing

General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	None established
Specific Gravity :	1.08 - 1.12
	20 °C
pH :	7.0 - 9.0
Boiling Point:	100 °C 212 °F
Freezing Point:	not applicable
Melting Point:	not applicable
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	no data available

Vapor Density:	> 1
Viscosity:	no data available
Solubility in Water:	soluble in cold water
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	<1
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat., Avoid freezing.
Chemical Incompatibility:	Strong oxidizing agents, Aluminium
Hazardous Decomposition Products:	Oxides of nitrogen, Carbon dioxide (CO ₂), Ammonia
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

GLYCINE, N- (2-BIS(CARBOXMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt	LD50	Approximately 10,000 mg/kg	rat
Citric Acid	LD50	= 3,000 mg/kg	rat
Sodium carbonate	LD50	= 4,090 mg/kg	rat
Trisodium nitrilotriacetate		> 1,100.0 mg/kg	rat

Component Animal Toxicology

Dermal LD50 value:

GLYCINE, N- (2-BIS(CARBOXMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt		no data available
Citric Acid	LD50	Believed to be > 2,000 mg/kg rabbit
Sodium carbonate	LD50	Believed to be > 2,000 mg/kg rabbit

Component Animal Toxicology

Inhalation LC50 value:

GLYCINE, N- (2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt Rats exposed for 8 hours to an unknown concentration of the test substance resulted in no deaths and no clinical signs of toxicity observed in the animals.

Citric Acid no data available

Sodium carbonate LC50 1 h = 4.6 MG/L rat

Trisodium nitrilotriacetate LC50 4 h > 5 MG/L rat

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be > 5,000 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 value: no data available

Skin Irritation: This material is expected to be slightly irritating.

Eye Irritation: This material is expected to be slightly irritating.

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: May cause mild skin and eye irritation. Ingestion may cause mild gastrointestinal discomfort. Inhalation of mist or vapor may cause irritation to the mucous membranes of the respiratory tract.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

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

Sodium carbonate This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Mutagenicity: Not known or reported to be mutagenic.

GLYCINE, N- (2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt This product was determined to be non-mutagenic in the Ames assay.

Citric Acid This product was determined to be non-mutagenic in the Ames assay. It was also shown to be negative in the Dominant lethal assay.

Sodium carbonate This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

Carcinogenicity: The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 2B substance, Possibly Carcinogenic to Humans.

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

Trisodium nitrilotriacetate The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 2B substance, Possibly Carcinogenic to Humans.

12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms.

Ecological Toxicity Values - Product:

- EC50 Believed to be approximately 1,500 mg/l (calculated)

Ecological Toxicity Values for: **GLYCINE, N- (2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, Trisodium Salt**

- Leuciscus idus (Golden orfe) - static test 96 h LC50 > 2,200 mg/l
- Daphnia magna (Water flea) - static test 48 h EC50 > 500 mg/l

Ecological Toxicity Values for: **Citric Acid**

- Lepomis macrochirus (Bluegill sunfish) - (static). 96 h LC50 = 1,516 mg/l
- Daphnia magna (Water flea) - 72 h EC50 Approximately 120 mg/l

Ecological Toxicity Values for: **Sodium carbonate**

- Fathead minnow (Pimephales promelas), - (nominal, static). 96 h LC50 < 850 mg/l
- Bluegill - (nominal, static). 96 h LC50 = 320 mg/l
- Mosquito fish - (nominal, static). 96 h LC50 = 740 mg/l
- Daphnia magna, - (nominal, static). 48 h LC50 = 265 mg/l
- Ceriodaphnia dubia - (nominal) 48 h EC50 = 199.82 mg/l
- Navicula seminulum (diatom) - (nominal, static). 96 h EC50 = 242 mg/l

Ecological Toxicity Values for: **Trisodium nitrilotriacetate**

- Lepomis macrochirus (Bluegill sunfish) - 96 h LC50 = 198 mg/l

Pimephales promelas (fathead minnow) - 96 h LC50 = 127 mg/l
Oncorhynchus mykiss (rainbow trout) - 96 h LC50 = 98 mg/l
Daphnia magna (Water flea) - 48 h LC50= 560 mg/l

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 liquid waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): UN3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., (GLYCINE, N-(2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, TRISODIUM SALT, TRISODIUM NITRILOTRIACETATE) 8 III Marine Pollutant: No

Air (IATA): UN3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., (GLYCINE, N-(2-BIS(CARBOXYMETHYL)AMINO)ETHYL)-N-2-HYDROXYETHYL)-, TRISODIUM SALT, TRISODIUM NITRILOTRIACETATE) 8 III

Emergency Response Guide Number: ERG # 153

Transportation Notes: Product not regulated for ground transport in the USA per exception permitted in 49 CFR 173.154(d).

EMS: F-A, S-B

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health	Immediate (Acute) Health Hazard
Physical	None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established
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Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	Sodium hydroxide Value: 1,000lbs
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ZUS_SAR302	Reportable quantity	None established
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Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
5064-31-3	Trisodium nitriлотriacetate
ZUSMA_RTK	

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1993-04-24
NITRILOTRIACETIC ACID TRISODIUM NTA TRISODIUM
Carcinogen, Extraordinarily hazardous

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent

80

Citric acid

Ingredient Disclosure List (WHMIS)

2007-08-24

Threshold limits: 1 Weight percent

392

Sodium carbonate

16. OTHER INFORMATION

MSDS REVISION STATUS :

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. .

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Foam Out**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 02/02/2011 SUPERCEDES: 06/01/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012521 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	This product is not considered to be hazardous under OSHA 29 CFR 1910.1200.
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Routes of Entry:	This product will not exert a significant adverse effect to health from any route of exposure.
Chemical Interactions:	None known.
Medical Conditions Aggravated:	None known.

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Foam Out

Human Threshold Response Data

Odor Threshold Not established for product.
Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	0	0	0	
NFPA	0	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to cause irritation. Not expected to be toxic by inhalation.
Skin Toxicity: Not expected to cause irritation. Not expected to be toxic from dermal contact.
Eye Toxicity: Not expected to cause irritation.
Ingestion Toxicity: Not expected to be toxic by ingestion. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Acute Target Organ Toxicity: None known.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The carcinogenicity of the active ingredient in this product has been evaluated through animal study and it was found not to be carcinogenic.
Reproductive and Developmental Toxicity: No reproductive or developmental risk to humans is expected from exposure to this product. The active ingredient in this product has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.
Inhalation: There are no known or reported effects from chronic exposure.
Skin Contact: There are no known or reported effects from chronic exposure.
Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.
Sensitization: This material is not known or reported to be a skin or respiratory sensitizer. The active ingredient in this product tested negative for skin sensitization in humans and laboratory animals.
Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.
Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Dimethicone	63148-62-9	

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
Skin Contact:	IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.
Ingestion:	IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards:	Material will not ignite or burn.
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions:	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.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Foam Out

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Spill Mitigation Procedures

Air Release: Keep people away from and upwind of spill/leak.
 Water Release: soluble if the product contaminates rivers and lakes or drains inform respective authorities.
 Land Release: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not contaminate ponds, waterways or ditches with chemical or used container.
 Additional Spill Information : Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapors, mist or gas.
 Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.
 Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed.
 Skin Protection : Impervious gloves
 Eye Protection: Safety glasses with side-shields
 Protective Clothing Type: impervious clothing

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	None established
Specific Gravity :	1.0
	20 °C
pH :	6.0 - 7.0
Boiling Point:	100 °C
	212 °F
Freezing Point:	
	not applicable
Melting Point:	
	not applicable
Density:	
Bulk Density:	no data available
Vapor Pressure:	no data available
Vapor Density:	no data available
Viscosity:	no data available
Solubility in Water:	soluble in cold water
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
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Chemical Incompatibility:	Oxidizing agents
Hazardous Decomposition Products:	Carbon oxides, Silicone
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Dimethicone LD50 > 5,000 mg/kg rat

Component Animal Toxicology

Dermal LD50 value:

Dimethicone LD50 > 2,000 mg/kg rabbit

Component Animal Toxicology

Inhalation LC50 value:

Dimethicone Inhalation LC50 1 h > 44 MG/L rat

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be > 5,000 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 value: LC50 1 h Believed to be > 44 mg/l rat

Skin Irritation: Not expected to cause irritation.

Eye Irritation: Not expected to cause irritation.

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer. The active ingredient in this product tested negative for skin sensitization in humans and laboratory animals.

Acute Toxicity: There are no known or reported target organ effects from acute exposure.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: No reproductive or developmental risk to humans is expected from exposure to this product. The active ingredient in this product has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.

Dimethicone This chemical has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.

Mutagenicity: Not known or reported to be mutagenic. The active ingredient in this product has been tested in a battery of mutagenicity assays and was found to be non-mutagenic under the conditions of the tests.

Dimethicone This chemical has been shown to be non-mutagenic based on a battery of assays.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. The carcinogenicity of the

Dimethicone active ingredient in this product has been evaluated through animal study and it was found not to be carcinogenic. The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.

12. ECOLOGICAL INFORMATION

Overview: Practically non-toxic to fish and other aquatic organisms. The acute 96 hr. LC50 of the active ingredient in this product to fathead minnows is > 1,000 mg/l.

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 liquid waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): Not Regulated NOT REGULATED AS A HAZARDOUS MATERIAL,
Marine Pollutant: No

Air (IATA): Not Regulated NOT REGULATED AS A HAZARDOUS MATERIAL,

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Foam Out

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Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health None
Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established
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Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established
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Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED: First formulated version in SAP.

Major References : Available upon request.

**MATERIAL SAFETY
DATA SHEET**

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. .

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FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 01/31/2011 SUPERCEDES: 06/22/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012514 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	This product is not considered to be hazardous under OSHA 29 CFR 1910.1200.
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Routes of Entry:	This product will not exert a significant adverse effect to health from any route of exposure.
Chemical Interactions:	None known.
Medical Conditions Aggravated:	None known.

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

Human Threshold Response Data

Odor Threshold Not established for product.
Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	0	0	0	
NFPA	0	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to cause irritation. Not expected to be toxic by inhalation.
Skin Toxicity: Not expected to cause irritation. Not expected to be toxic from dermal contact.
Eye Toxicity: Not expected to cause irritation.
Ingestion Toxicity: Not expected to be toxic by ingestion. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Acute Target Organ Toxicity: None known.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity: There are no known or reported effects on reproductive function or fetal development.
Inhalation: There are no known or reported effects from chronic exposure.
Skin Contact: There are no known or reported effects from chronic exposure.
Ingestion: There are no known or reported effects from chronic exposure.
Sensitization: Not expected to be a skin sensitizer.
Chronic Target Organ Toxicity: None known
Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
2-PROPEN-1-AMINIUM, N,N-DIMETHYL-N-2-PROPENYL-, C	26062-79-3	

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
Skin Contact:	IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.
Ingestion:	IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	Combustible above 93 deg. C / 200 deg. F.
<u>Flammable Properties</u>	
Fire / Explosion Hazards:	May be ignited by open flame.
Extinguishing Media:	Water fog Carbon dioxide (CO2) Foam Dry powder
Fire Fighting Instructions:	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.
Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.
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Spill Mitigation Procedures

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

Air Release: Keep people away from and upwind of spill/leak.
Water Release: soluble if the product contaminates rivers and lakes or drains inform
respective authorities.
Land Release: Contain spillage, soak up with non-combustible absorbent material,
(e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a
container for disposal according to local / national regulations (see
section 13). Do not contaminate ponds, waterways or ditches with
chemical or used container.
Additional Spill Information : Prevent further leakage or spillage if safe to do so. Use personal
protective equipment as required. Evacuate personnel to safe areas.
Remove all sources of ignition.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If
in eyes or on skin, rinse well with water. Avoid breathing vapors,
mist or gas.
Storage: Store in a cool, dry and well ventilated place. Isolate from
incompatible materials. Do not freeze.
Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional
ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed.
Skin Protection : Impervious gloves
Eye Protection: Safety glasses with side-shields
Protective Clothing Type: impervious clothing

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

REVISION DATE: 01/31/2011

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Form	No data.
Color:	blue
Odor:	No data.
Molecular Weight:	None established
Specific Gravity :	1.0 - 1.1
pH :	20 °C 2.0 - 3.0
Boiling Point:	100 °C 212 °F
Freezing Point:	
Melting Point:	not applicable
Density:	not applicable
Bulk Density:	no data available
Vapor Pressure:	no data available
Vapor Density:	not determined
Viscosity:	no data available
Solubility in Water:	soluble in cold water
Partition coefficient n- octanol/water:	Not applicable
Evaporation Rate:	<1
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks.
Chemical Incompatibility:	Oxidizing agents
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

2-PROPEN-1-AMINIUM, LD50 > 5,000 mg/kg Rat
N,N-DIMETHYL-N-2-
PROPENYL-, C

Component Animal Toxicology

Dermal LD50 value:

2-PROPEN-1-AMINIUM, LD50 > 20,000 mg/kg Rabbit
N,N-DIMETHYL-N-2-
PROPENYL-, C

Component Animal Toxicology

Inhalation LC50 value:

2-PROPEN-1-AMINIUM, No data
N,N-DIMETHYL-N-2-
PROPENYL-, C

Product Animal Toxicity

Oral LD50 value: LD50 > 5,000 mg/kg rat
Dermal LD50 value: LD50 > 2,000 mg/kg rabbit
Inhalation LC50 no data available

value:

Skin Irritation: Not expected to cause irritation.
Eye Irritation: Not expected to cause irritation.
Skin Sensitization: Not believed to be sensitising to skin.

Acute Toxicity: There are no known or reported target organ effects from acute exposure.
Subchronic / Chronic Toxicity: There are no known or reported effects from chronic exposure.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.

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

12. ECOLOGICAL INFORMATION

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

Ecological Toxicity Values for: 2-PROPEN-1-AMINIUM, N,N-DIMETHYL-N-2-PROPENYL-, C

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

- Bluegill sunfish - 96 h LC50 = 0.82 - 1.3 mg/l, (40% Solution)
- Rainbow trout (Salmo gairdneri), - 96 h LC50 0.37 mg/l (40% Solution)
- Daphnia magna, - 48 h LC50= 0.9 mg/l (In clear water), (40% Solution)
- Daphnia magna, - 48 h LC50= 1.2 - 2.5 mg/l, (In 50 ppm clay suspension), (40% Solution)
- Daphnia magna, - 48 h LC50= 24.8 mg/l (In 1000 ppm clay suspension), (40% Solution)

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 liquid waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): Not Regulated NOT REGULATED AS A HAZARDOUS MATERIAL,
Marine Pollutant: No

Air (IATA): Not Regulated NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health NoneNone
Physical NoneNone

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established
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Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111	None established
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Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
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ZUS_CAAHRP	None established
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RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :

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. .

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

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**MATERIAL SAFETY
DATA SHEET**

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Clarifier

REVISION DATE: 01/31/2011

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FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL: 1-800-654-6911 (OUTSIDE
USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE
USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE
USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Natural Clear**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 05/05/2011 SUPERCEDES: 06/12/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012568 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.
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Routes of Entry: This product will not exert a significant adverse effect to
health from any route of exposure.
Chemical Interactions: None known.
Medical Conditions Aggravated: None known.

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Natural
Clear

Human Threshold Response Data

Odor Threshold Not established for product.
Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	0	0	0	
NFPA	0	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be toxic by inhalation. Not expected to cause irritation.
Skin Toxicity: Not expected to cause irritation. Not expected to be toxic from dermal contact.
Eye Toxicity: Not expected to be irritating.
Ingestion Toxicity: Not expected to be toxic by ingestion. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Acute Target Organ Toxicity: There are no known or reported target organ effects from acute exposure.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.
Inhalation: There are no known or reported effects from chronic exposure.
Skin Contact: There are no known or reported effects from chronic exposure.
Skin Absorption: There are no known or reported effects from chronic exposure.
Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.
Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.
Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.
Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
No ingredients are hazardous according to HCS criteria.		

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
Skin Contact:	IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
Eye Contact:	IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.
Ingestion:	IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards:	Will not burn
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions:	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.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:	not applicable
Water Release:	If the product contaminates rivers and lakes or drains inform respective authorities.

Land Release: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not contaminate ponds, waterways or ditches with chemical or used container.

Additional Spill Information : Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothing. Do not take internally. If in eyes or on skin, rinse well with water.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed.
 Skin Protection : Impervious gloves
 Eye Protection: Safety glasses with side-shields
 Protective Clothing Type: impervious clothing

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid
 Form: No data.
 Color: No data.
 Odor: No data.
 Molecular Weight: None established
 Specific Gravity : 0.99 - 1.1

pH :	20 °C 6.0 - 8.0
Boiling Point:	100 °C 212 °F
Freezing Point:	not applicable
Melting Point:	not applicable
Density:	not applicable
Bulk Density:	no data available
Vapor Pressure:	no data available
Vapor Density:	not applicable
Viscosity:	no data available
Solubility in Water:	soluble in cold water
Partition coefficient n- octanol/water:	Not applicable
Evaporation Rate:	
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat.
Chemical Incompatibility:	None known.
Hazardous Decomposition Products:	None known
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Product Animal Toxicity
Oral LD50 value: LD50 Believed to be > 5,000 mg/kg rat

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Natural Clear

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Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit
Inhalation LC50 value: LC50 no data available
 Skin Irritation: Not expected to cause irritation.
 Eye Irritation: Not Irritating to the Eyes
 Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.
 Acute Toxicity: There are no known or reported target organ effects from acute exposure.
 Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.
 Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.
 Mutagenicity: Not known or reported to be mutagenic.
 Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

12. ECOLOGICAL INFORMATION

Overview: There is no data available for this product.

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.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
 Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
 Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health None
 Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity Sodium hydroxide
 Value: 1,000lbs
 Diethyl phthalate
 1,2-Benzenedicarboxylic acid, diethyl ester
 Value: 1,000lbs

ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC

US. EPA Hazardous Organic NESHP (HON) Synthetic Organic Chemicals (40 CFR 63.100-.106, Table 1)

07 1999

Group III

BENZYL BENZOATE

Clean Air Act VOC Section 111:

CAA 111

US. EPA Clean Air Act (CAA) Section 111 SOCMI Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

01 1996

POLYETHYLENE GLYCOL 200

US. EPA Clean Air Act (CAA) Section 111 SOCMI Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

01 1996

PROPANOL, OXYBIS-

US. EPA Clean Air Act (CAA) Section 111 SOCMI Intermediate or Final Volatile Organic Compounds (40 CFR 60.489)

01 1996

BENZOIC ACID, PHENYLMETHYL ESTER

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
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RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Natural Clear

REVISION DATE: 05/05/2011

57-55-6	PROPYLENE GLYCOL
1310-73-2	SODIUM HYDROXIDE
25265-71-8	Dipropylene glycol
84-66-2	Diethyl Phthalate
1317-65-3	Calcium Carbonate
	Starch High polymeric carbohydrate material usually derived from cereal grains such as corn, wheat and sorghum
	cis-hex-3-en-1-ol

ZUSPA_RTK

Pennsylvania: Hazardous substance list
1989-08-11
1,2-PROPANEDIOL

Pennsylvania: Hazardous substance list
1989-08-11
SODIUM HYDROXIDE
Environmental hazard

Pennsylvania: Hazardous substance list
1989-08-11
PROPANOL, OXYBIS-

Pennsylvania: Hazardous substance list
1989-08-11
1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER
Environmental hazard

Pennsylvania: Hazardous substance list
1989-08-11
LIMESTONE

Pennsylvania: Hazardous substance list
1990-01-01
STARCH
hazardous substance

Pennsylvania: Hazardous substance list
1989-08-11
STARCH

Pennsylvania: Hazardous substance list

1989-08-11
3-HEXEN-1-OL, (Z)-

New Jersey:

CAS #	COMPONENT NAME
107-75-5	HYDROXYCITRONELLAL
31906-04-4	4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde
120-51-4	BENZYL BENZOATE
103-95-7	3-p-Cumenyl-2-methylpropionaldehyde
106-22-9	CITRONELLOL
118-58-1	BENZYL SALICYLATE
80-54-6	LILIAL
101-86-0	alpha-Hexylcinnamaldehyde
1317-65-3	Calcium Carbonate
106-24-1	GERANIOL
84-66-2	Diethyl Phthalate
1310-73-2	SODIUM HYDROXIDE
57-55-6	PROPYLENE GLYCOL

ZUSNJ_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
ALDEHYDES, n.o.s.
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
ALDEHYDES, n.o.s.
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Natural Clear

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New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
ALDEHYDES, n.o.s.
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
ALDEHYDES, n.o.s.
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
ALDEHYDES, n.o.s.
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01
CALCIUM CARBONATE LIMESTONE VALERITE MARBLE

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

1989-12-01
PERFUMERY PRODUCTS, WITH FLAMMABLE SOLVENT
hazardous substance

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties Natural
Clear

**MATERIAL SAFETY
DATA SHEET**

2007-03-01
DIETHYL PHTHALATE 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER DEP
ETHYL PHTHALATE

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01
SODIUM HYDROXIDE SODIUM HYDROXIDE (Na(OH)) CAUSTIC SODA SODIUM
HYDRATE
Special Health Hazard - Corrosive

New Jersey Right to Know Hazardous Substance List (RTK-HSL)

2007-03-01
PROPYLENE GLYCOL 1,2-PROPANEDIOL

Massachusetts:

CAS #	COMPONENT NAME
1310-73-2	SODIUM HYDROXIDE
84-66-2	Diethyl Phthalate
1317-65-3	Calcium Carbonate
	Starch High polymeric carbohydrate material usually derived from cereal grains such as corn, wheat and sorghum

ZUSMA_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1993-04-24
SODIUM HYDROXIDE

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1994-04-24
1,2-BENZENEDICARBOXYLIC ACID DIETHYL ESTER
massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1994-04-01
DIETHYL PHTHALATE 1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER

Massachusetts Right to Know List of Chemicals and Hazard Classifications

1994-04-01
CALCIUM CARBONATE LIMESTONE MARBLE DUST

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1991-07-01
MARBLE DUST
massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1991-07-01
STARCH DUST
massachusetts hazardous substance

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1994-04-01
STARCH DUST (Dust)

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
1454
1,2-Propylene glycol

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
998
Sodium hydroxide

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 0.1 Weight percent
1417
Diethyl phthalate

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent

185
Phenethyl alcohol

Ingredient Disclosure List (WHMIS)
2007-08-24

Threshold limits: 1 Weight percent

189
Lauryl aldehyde

16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED: First formulated version in SAP.

Major References : Available upon request.

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USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: 1-800-424-9300 (OUTSIDE
USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL: 1-800-511-MSDS (OUTSIDE
USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties pH Down**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 04/07/2011 SUPERCEDES: 05/28/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012585 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Corrosive to skin, Corrosive to eyes, Corrosive to mucous membranes
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Routes of Entry: Eyes Skin Ingestion Inhalation
Chemical Interactions: None known.
Medical Conditions Aggravated: Asthma, Respiratory disorders, Heart disease, Skin disorders

Human Threshold Response Data

Odor Threshold Not established for product.

Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	3	0	0	
NFPA	3	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Inhalation of dust may cause irritation and/or burns to the mucous membranes of the respiratory tract.

Skin Toxicity: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS. Dermal exposure to dry material causes moderate skin irritation characterized by redness and swelling. Dermal exposure to wet material can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage.

Eye Toxicity: Causes eye burns.

Ingestion Toxicity: Causes digestive tract burns.

Acute Target Organ Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract., The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

Prolonged (Chronic) Health Effects

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

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.

Skin Absorption: There are no known or reported effects from chronic exposure.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure. The acute corrosivity of this product, makes chronic ingestion of significant amounts unlikely.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic Target Organ Toxicity: There are no known or reported target organ effects from chronic exposure.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
SULFURIC ACID, MONOSODIUM SALT	7681-38-1	
SULFURIC ACID DISODIUM SALT	7757-82-6	

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

Skin Contact: IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention if irritation develops.

Eye Contact: IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.

Ingestion: IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards: Will not burn

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire Fighting Instructions: 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.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release: Keep people away from and upwind of spill/leak.

Water Release: Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Land Release: Sweep up and shovel into suitable containers for disposal. Avoid creating dust. Do not place spill materials back in their original containers.

Additional Spill Information : Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust. Avoid contact with water, or moist air.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

Do Not Store At temperatures Above: 175 °C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Protective Equipment for Routine Use of Product

Respiratory Protection : If dusting occurs, wear a NIOSH approved respirator., NIOSH approved full-face air purifying respirator with an N95 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Avoid contact with skin. Impervious gloves

Eye Protection: Chemical resistant goggles must be worn.

Protective Clothing Type: Butyl rubber, Neoprene

General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	120 Gm
Specific Gravity :	not applicable
pH :	0.0 - 1.0
	50 g/l
Boiling Point:	not applicable
Freezing Point:	176.7 °C
	350 °F
Melting Point:	176.7 °C
	350 °F
Density:	no data available
Bulk Density:	155 kg/m3
Vapor Pressure:	no data available
Vapor Density:	not applicable
Viscosity:	no data available

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Solubility in Water:	soluble
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	not applicable
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat., Exposure to moisture.
Chemical Incompatibility:	Bases, Acids, Oxidizing agents
Hazardous Decomposition Products:	Sulphur oxides
Decomposition Temperature:	315 °C

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

SULFURIC ACID, MONOSODIUM SALT	LD50 Believed to be 2,800 mg/kg	Rat
SULFURIC ACID DISODIUM SALT	LD50 = 5,989 mg/kg	mouse
SULFURIC ACID DISODIUM SALT	LD50 Believed to be > 10,000 mg/kg	rat

Component Animal Toxicology

Dermal LD50 value:

SULFURIC ACID, MONOSODIUM SALT	No data
SULFURIC ACID DISODIUM SALT	no data available

Component Animal Toxicology

Inhalation LC50 value:

SULFURIC ACID, MONOSODIUM SALT	No data
SULFURIC ACID DISODIUM SALT	no data available

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be > 3,000 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 value: no data available

Skin Irritation: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION., WET MATERIAL CAUSES SKIN BURNS.

Eye Irritation: Corrosive to eyes

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.
SULFURIC ACID DISODIUM SALT This product was determined to be non-mutagenic in the Ames assay., This product has been shown to be negative for cell transformation in the Syrian hamster embryo (SA7/SHE) cell assay.

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

12. ECOLOGICAL INFORMATION

Overview: Slightly toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: **SULFURIC ACID, MONOSODIUM SALT**

Daphnia magna, - 100 h LC50 > 106 mg/l

Ecological Toxicity Values for: **SULFURIC ACID DISODIUM SALT**

Lepomis macrochirus (Bluegill sunfish) - 96 h LC50 = 12,750 mg/l

Pimephales promelas (fathead minnow) - 96 h LC50 = 7,960 mg/l

Gambusia affinis (Mosquito fish) - 96 h LC50 = 3,710 mg/l

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Daphnia magna (Water flea) - 48 h LC50= 2,564 mg/l
 Ceriodaphnia dubia - 48 h LC50= 3,080 mg/l

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.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
 Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL, Marine Pollutant:
 No

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
 Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals Not registered in the US under FIFRA.

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(40 CFR 180):

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard
Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity None established
ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
7757-82-6	SULFURIC ACID DISODIUM SALT
ZUSPA_RTK	

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**MATERIAL SAFETY
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Pennsylvania: Hazardous substance list
1990-01-01
SODIUM SULFATE (SOLUTION)
Environmental hazard, hazardous substance

New Jersey:

CAS #	COMPONENT NAME
7681-38-1	SULFURIC ACID, MONOSODIUM SALT

ZUSNJ_RTK

New Jersey Right to Know Hazardous Substance List (RTK-HSL)
1989-12-01
SODIUM HYDROGEN SULFATE
special health hazard substance, Special Health Hazard - Corrosive

Massachusetts:

CAS #	COMPONENT NAME
7757-82-6	SULFURIC ACID DISODIUM SALT

ZUSMA_RTK

Massachusetts Right to Know List of Chemicals and Hazard Classifications
1991-07-01
SODIUM SULFATE (SOLUTION)
massachusetts hazardous substance

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
305
Sodium bisulfate

16. OTHER INFORMATION

MSDS REVISION STATUS :

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. .

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties pH Up**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 05/23/2011 SUPERCEDES: 06/01/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012586 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Moderate eye irritant
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Routes of Entry:	Eyes Skin Inhalation Ingestion
Chemical Interactions:	None known.
Medical Conditions Aggravated:	None known.

RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties pH
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Human Threshold Response Data

Odor Threshold Not established for product.

Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	2*	0	0	
NFPA	2	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: May be harmful if inhaled. Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.

Skin Toxicity: Contact with intact skin may cause slight to mild irritation consisting of reversible redness. Contact with abraded skin may cause moderate irritation consisting of transient redness and swelling. This irritant effect would not be expected to result in permanent damage. Not expected to be toxic from dermal contact.

Eye Toxicity: Causes eye irritation.

Ingestion Toxicity: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Acute Target Organ Toxicity: This product is moderately irritating to the eyes and upon inhalation may cause irritation to the mucous membranes of the respiratory tract. Ingestion may cause gastrointestinal discomfort.

Prolonged (Chronic) Health Effects

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

Reproductive and Developmental Toxicity: This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: Repeated or prolonged skin exposure may cause dermatitis and possible "soda ulcers" (blistering) of the hands and wrists. This can result in secondary infections.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Chronic Target Organ Toxicity: There are no known or reported effects to humans from repeated exposure to this product.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
Sodium carbonate	497-19-8	

4. FIRST AID MEASURES

Inhalation:	IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.
Skin Contact:	IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention.
Eye Contact:	IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.
Ingestion:	IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): The product is not flammable., Not combustible., The substance or mixture is not classified as pyrophoric., Not explosive

Flammable Properties

Fire / Explosion Hazards:	Will not burn
Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire Fighting Instructions:	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.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide, Sodium oxide

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:

not applicable

Water Release:

This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Land Release:

Sweep up and shovel into suitable containers for disposal. Avoid dust generation. Do not place spill materials back in their original containers. After removal, flush contaminated area thoroughly with water.

Additional Spill Information :

Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust.

Storage: Store in a cool, dry and well ventilated place. Isolate from incompatible materials.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed., If dusting occurs, wear a NIOSH approved N95 dust respirator.

Skin Protection : Impervious gloves

Eye Protection: Chemical resistant goggles must be worn.

Protective Clothing Type: Natural rubber, Neoprene, Nitrile

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General Protective Measures:

Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	None established
Specific Gravity :	2.5
	20 °C
pH :	11.0 - 12.0
	10 g/l (as aqueous solution)
Boiling Point:	
	Decomposes before boiling
Freezing Point:	851.1 °C
	1,564 °F
Melting Point:	851.1 °C
	1,564 °F
Density:	1.04 g/cm3
Bulk Density:	no data available
Vapor Pressure:	not applicable
Vapor Density:	not applicable
Viscosity:	no data available
Solubility in Water:	320 g/l
	25 °C
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	not applicable
VOC Content	not applicable
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions.
 Conditions to Avoid: Heat.
 Chemical Incompatibility: Aluminum powder, Acids, Fluorine, Molten lithium
 Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sodium oxide
 Decomposition Temperature: 851 °C

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Sodium carbonate LD50 = 4,090 mg/kg rat

Component Animal Toxicology

Dermal LD50 value:

Sodium carbonate LD50 Believed to be > 2,000 mg/kg rabbit

Component Animal Toxicology

Inhalation LC50 value:

Sodium carbonate LC50 1 h = 4.6 MG/L rat

Product Animal Toxicity

Oral LD50 value: LD50 = 4,090 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 LC50 1 h = 4.6 mg/l rat

value:

Skin Irritation: May cause mild skin irritation.

Eye Irritation: Moderate eye irritant

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: Contact with the eyes and mucous membranes causes transient irritation. Minor corneal involvement may occur if product is not rinsed immediately from the eyes. Inhalation may cause irritation. Contact with skin causes irritation.

Subchronic / Chronic Toxicity: Damage to lungs has been observed in laboratory animals from repeated inhalation of high concentrations (70 mg/m³). This damage is characterized by thickening of the walls of the air sacs and a low grade of pulmonary inflammation. The risk to human health is low due to the high concentration required to produce the effect., Repeated or prolonged skin contact with this product may cause dermatitis and blistering.

Reproductive and Developmental Toxicity: This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Sodium carbonate This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen.

Mutagenicity: This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

Sodium carbonate This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

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

12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: Sodium carbonate

Fathead minnow (Pimephales promelas),	- (nominal, static). 96 h LC50 < 850 mg/l
Bluegill	- (nominal, static). 96 h LC50 = 320 mg/l
Mosquito fish	- (nominal, static). 96 h LC50 = 740 mg/l
Daphnia magna,	- (nominal, static). 48 h LC50= 265 mg/l
Ceriodaphnia dubia	- (nominal) 48 h EC50= 199.82 mg/l
Navicula seminulum (diatom)	- (nominal, static). 96 h EC50 = 242 mg/l

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.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
 Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL, Marine Pollutant:
 No

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
 Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
 Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity None established
 ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
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RENDEZVOUS SPA SPECIALTIES DELUXE SPA CARE KIT BROMINE - Rendezvous Spa Specialties pH
 Up

ZUSMA_RTK None established

California Proposition 65:

CAS #	COMPONENT NAME
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ZUSCA_P65 None established

WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 1 Weight percent
392
Sodium carbonate

16. OTHER INFORMATION

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

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FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Broma-Start**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 03/31/2011 SUPERCEDES: 05/22/2009
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012587 SYNONYMS: Sodium bromide CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Mild eye, skin and mucous membrane irritant, Eye hazard
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Routes of Entry:	Inhalation, skin, eyes, ingestion
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	Pre-existing skin disorders., Nervous system disorders

Human Threshold Response Data

Odor Threshold Not established.

Irritation Threshold Not established.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	1	0	0	
NFPA	1	0	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Inhalation of dust may cause irritation to the mucous membranes of the respiratory tract. Any irritation would be transient with no permanent damage expected.

Skin Toxicity: Skin contact may cause minor irritation consisting of transient redness and/or swelling. Not expected to be toxic from dermal contact.

Eye Toxicity: Contact would be expected to cause minor irritation, consisting of transient redness and swelling. No corneal involvement or visual impairment is expected. Visual hallucinations and disturbances of color vision have been noted from the action of bromides on the eye.

Ingestion Toxicity: Ingestion may cause irritation of the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Ingestion of large quantities of this product may result in central nervous system (CNS) depression. Slightly toxic if swallowed.

Acute Target Organ Toxicity: May cause mild skin and eye irritation. Inhalation of dust may cause mild mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.

Prolonged (Chronic) Health Effects

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

Reproductive and Developmental Toxicity: There are no known or reported effects on reproductive function or fetal development.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: Repeated or prolonged skin contact may cause some individuals to develop skin rashes (bromoderma).

Ingestion: Chronic ingestion may cause bromism, characterized by: central nervous system depression, ataxia (staggered gait), general muscular weakness and skin rashes.

Sensitization: This material tested negative for skin sensitization in animals.
 Chronic Target Organ Toxicity: Central nervous system, Skin
 Supplemental Health Hazard No additional health information available.
 Information :

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
SODIUM BROMIDE (NABR)	7647-15-6	

4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.
 Skin Contact: IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.
 Eye Contact: IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention immediately.
 Ingestion: IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

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

Flammable Properties

Fire / Explosion Hazards: Material will not ignite or burn.
 Extinguishing Media: Not Applicable. - Choose extinguishing media suitable for surrounding materials.
 Fire Fighting Instructions: 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.
 Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release:

Keep people away from and upwind of spill/leak.

Water Release:

This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.

Land Release:

Sweep up and shovel into suitable containers for disposal. After removal, flush contaminated area thoroughly with water. Do not contaminate ponds, waterways or ditches with chemical or used container.

Additional Spill Information :

Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

7. HANDLING AND STORAGE

Handling:

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid inhalation of dust and fumes.

Storage:

Store in a cool, dry and well ventilated place. Keep containers tightly closed when not in use. Avoid creating dusts.

Incompatible Materials for Storage:

Refer to Section 10, "Incompatible Materials."

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation:

Ventilation beyond that of general exhaust is not normally required. No exposure limits exist for the constituents of this product.

Protective Equipment for Routine Use of Product

Respiratory Protection :

Respiratory protection not normally needed., If dusting occurs, wear a NIOSH approved respirator., Wear a NIOSH approved N95 respirator.

Skin Protection : Wear impervious gloves to avoid skin contact.
 Eye Protection: Use safety glasses with side shields. Emergency eyewash should be provided in the immediate work area.
 Protective Clothing Type: Impervious

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	No data.
Odor:	No data.
Molecular Weight:	102.9 Gm
Specific Gravity :	3.21
	20 °C
pH :	6.5 - 8.0
	1% solution
Boiling Point:	1,390 °C
	2,435 °F
Freezing Point:	755 °C
	1,391 °F
Melting Point:	755 °C
	1,391 °F
Density:	no data available
Bulk Density:	no data available
Vapor Pressure:	1.3 hPa
	806 °C
Vapor Density:	not applicable
Viscosity:	not applicable
Solubility in Water:	946 g/l
	25 °C
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions.
 Conditions to Avoid: High temperatures, Exposure to moist air or water, Contact with incompatible substances
 Chemical Incompatibility: Strong oxidizing agents, Strong acids, Bromine trifluoride, Heavy metal salts
 Hazardous Decomposition Products: Hydrogen bromide, Sodium oxide
 Decomposition Temperature: No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

SODIUM BROMIDE LD50 = 3,500 mg/kg Rat
 (NABR)

Component Animal Toxicology

Dermal LD50 value:

SODIUM BROMIDE LD50 Believed to be > 2,000 mg/kg Rabbit
 (NABR)

Component Animal Toxicology

Inhalation LC50 value:

SODIUM BROMIDE No data
 (NABR)

Product Animal Toxicity

Oral LD50 value: LD50 = 3,500 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 no data available

value:

Skin Irritation: May cause mild skin irritation.

Eye Irritation: May cause mild eye irritation.

Skin Sensitization: This material tested negative for skin sensitization in animals.

Acute Toxicity: May cause mild skin and eye irritation. Inhalation of dust may cause mild mucous membrane irritation (includes upper respiratory tract). Ingestion may cause gastrointestinal discomfort.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: A three-generation reproduction study on the effects of sodium bromide in rats showed that at extremely high oral doses (4,800 mg/kg. and 19,200 mg/kg.) there was a marked decrease in the fertility of both the male and female rats. The effects of bromide on reproduction were reversible upon bromide withdrawal. Macroscopic examination of all pups born during the entire experimental period provided no evidence of birth defects.

Mutagenicity: Not known or reported to be mutagenic.

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

12. ECOLOGICAL INFORMATION

Overview: Practically non- toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: **SODIUM BROMIDE (NABR)**

- Fathead minnow (*Pimephales promelas*), - (nominal, static). 96 h LC50 = 16,479 mg/l
- Daphnia magna, - (nominal, static). 48 h LC50= 11,000 mg/l
- Daphnia magna, - (nominal, static). 48 h EC50= 5,800 mg/l
- Green algae (*Scenedesmus quadricauda*), - (nominal, static). 7 day toxicity threshold for mortality = 2,800 mg/l

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.

Disposal Methods : As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

Land (US DOT): NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard
Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

Reportable Quantity (49 CFR 172.101, Appendix):

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

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HON SOC None established

Clean Air Act VOC Section 111:
CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
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New Jersey:

CAS #	COMPONENT NAME
-------	----------------

Massachusetts:

CAS #	COMPONENT NAME
-------	----------------

California Proposition 65:

CAS #	COMPONENT NAME
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WHMIS Hazard Classification:

Ingredient Disclosure List (WHMIS)
2007-08-24
Threshold limits: 0.1 Weight percent
341
Sodium bromide

16. OTHER INFORMATION

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

MATERIAL SAFETY DATA SHEET

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. .

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

**PRODUCT NAME: RENDEZVOUS SPA SPECIALTIES DELUXE SPA
CARE KIT BROMINE - Rendezvous Spa Specialties Bromine Float**

1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Rendezvous 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 United States	REVISION DATE: 08/05/2013 SUPERCEDES: 12/09/2011
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspace.com	MSDS Number: 000000012592 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1400 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Toxic by ingestion, Corrosive to eyes, Skin and respiratory irritant, Possible skin sensitizer, Oxidizer, Corrosive to skin
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Routes of Entry:	Eyes Ingestion Inhalation Skin
Chemical Interactions:	No known or reported interactions.
Medical Conditions Aggravated:	Respiratory diseases including asthma and bronchitis, Skin diseases including eczema and sensitization

Human Threshold Response Data

Odor Threshold Not established for product.
Irritation Threshold Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	3	1	1	
NFPA	3	1	1	OX

Immediate (Acute) Health Effects

Inhalation Toxicity: Inhalation of dust may cause mucous membrane and lung irritation with symptoms of coughing and choking.
Skin Toxicity: Skin contact may cause mild to moderate irritation consisting of transient redness and swelling. This irritant effect would not be expected to result in permanent damage. Prolonged or repeated exposure may cause severe irritation. Not expected to be toxic from dermal contact.
Eye Toxicity: Causes eye burns.
Ingestion Toxicity: Toxic if swallowed. Causes digestive tract burns.
Acute Target Organ Toxicity: Corrosive to the eyes and mildly to moderately irritating to the skin and respiratory tract.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.
Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.
Skin Contact: There are no known or reported effects from chronic exposure except for effects (if any) similar to those experienced from acute exposure.
Ingestion: Chronic ingestion of this product may cause severe irritation and possible corrosive effects.
Eye Contact: Prolonged contact may result in permanent damage. Corneal involvement or visual impairment is expected.
Sensitization: May cause allergic skin sensitization in some individuals.
Chronic Target Organ Toxicity: This product has not been tested. However based on similar structured products, this product may cause allergic skin sensitization.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL	118-52-5	
2,4-IMIDAZOLIDINEDIONE, 1-BROMO-3-CHLORO-5,5-DIMEMETHYL	16079-88-2	
2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL-5-METHYL	89415-87-2	

4. FIRST AID MEASURES

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Eye Contact:	IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Ingestion:	IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Notes to Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	Combustible above 93 deg. C / 200 deg. F.
<u>Flammable Properties</u>	
Flash Point:	141 °C
Fire / Explosion Hazards:	May intensify fire; oxidiser. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust in air can be an explosion hazard.
Extinguishing Media:	Water Foam Dry chemical
Fire Fighting Instructions:	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.
Upper Flammable / Explosive Limit, % in air:	Not applicable
Lower Flammable / Explosive Limit, % in air:	Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.
<u>Spill Mitigation Procedures</u>	
Air Release:	Keep people away from and upwind of spill/leak.
Water Release:	If the product contaminates rivers and lakes or drains inform respective authorities.
Land Release:	Sweep up and shovel into suitable containers for disposal. Avoid creating dust.
Additional Spill Information :	Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas. Remove all sources of ignition.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing dust.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed.

Shelf Life Limitations: Maximum storage temperature:

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

Do Not Store At temperatures Above: 37 °C

Empty Container Warning: Empty containers retain hazardous residue, dispose of accordingly.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection : Wear a NIOSH approved respirator if levels above the exposure limits are possible., A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Impervious gloves When exposure to high concentrations are prolonged or repeated use protective boots and apron in addition to gloves.

Eye Protection: Chemical resistant goggles must be worn.

Protective Clothing Type: impervious clothing, Neoprene

General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL	118-52-5	ACGIH	0.2 mg/m ³ TWA
2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL	118-52-5	ACGIH	0.4 mg/m ³ STEL

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL	118-52-5	OSHA Z1	0.2 mg/m3 TWA
2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL	118-52-5	NIOSH-IDLH	5 mg/m3

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	No data.
Color:	off-white
Odor:	No data.
Molecular Weight:	None established
Specific Gravity :	1.8 - 2.0
	20 °C
pH :	3.6
	25.0 °C 10.0 g/l
Boiling Point:	
	not applicable
Freezing Point:	120 - 148 °C
Melting Point:	120 - 148 °C
Density:	1.6 g/cm3
Bulk Density:	no data available
Vapor Pressure:	not applicable
Vapor Density:	Not volatile
Viscosity:	not applicable
Solubility(ies):	5 g/l
	25.0 °C
Solubility in Water:	2 g/l
	25 °C
Partition coefficient n-octanol/water:	Not applicable
Evaporation Rate:	not applicable
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	no data available
HAP Content	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions.
 Conditions to Avoid: Heat, flames and sparks., Exposure to moisture.
 Chemical Incompatibility: Strong acids and strong bases, Oxidizing agents, Reducing agents, Organic materials, Avoid moisture.
 Hazardous Decomposition Products: Carbon oxides, Bromine, Chlorine, Nitrogen
 Decomposition Temperature: 165 °C

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

2,4- IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5- DIMETHYL	LD50 = 542 mg/kg	Rat
2,4- IMIDAZOLIDINEDIONE, 1-BROMO-3-CHLORO- 5,5-DIMEMETHYL	LD50 = 929 mg/kg	rat
2,4- IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL- 5-METHYL	No data	

Component Animal Toxicology

Dermal LD50 value:

2,4- IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5- DIMETHYL	LD50 > 20,000 mg/kg	Rabbit
2,4- IMIDAZOLIDINEDIONE, 1-BROMO-3-CHLORO- 5,5-DIMEMETHYL	LD50 > 2,000 mg/kg	rabbit
2,4- IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL- 5-METHYL	No data	

Component Animal Toxicology

Inhalation LC50 value:

2,4- IMIDAZOLIDINEDIONE,	LC50 4 h = 1.1 mg/l	rat
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1-BROMO-3-CHLORO-
5,5-DIMETHYL

Component Animal Toxicology

Inhalation LC50 value:

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL Inhalation LCLo 1 h = 20 MG/L Rat

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL-5-METHYL No data

Product Animal Toxicity

Oral LD50 value: LD50 = 468 - 477 mg/kg rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg rabbit

Inhalation LC50 value: LC50 no data available

Skin Irritation: This material is expected to be mildly to moderately irritating., Draize score, Rabbit = 3.84/8.0

Eye Irritation: Corrosive to eyes

Skin Sensitization: May cause allergic skin sensitization in some individuals.

Acute Toxicity: Corrosive to the eyes and mildly to moderately irritating to the skin and respiratory tract.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Not known or reported to be mutagenic.

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL This product was determined to be non-mutagenic in the Ames assay.

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL-5-METHYL Not known or reported to be mutagenic.

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

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5,5-DIMETHYL This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

2,4-IMIDAZOLIDINEDIONE, 1,3-DICHLORO-5-ETHYL-5-METHYL This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

12. ECOLOGICAL INFORMATION

Overview: Highly toxic to fish and other aquatic organisms.

Ecological Toxicity Values - Product:

Oncorhynchus mykiss (rainbow trout)	-	96 h LC50 = 0.5 mg/l
Lepomis macrochirus (Bluegill sunfish)	-	96 h LC50 = 1.2 mg/l
Cyprinodon variegatus (sheepshead minnow)	-	96 h LC50 = 1.4 mg/l (as Br2)
Daphnia magna (Water flea)	-	48 h LC50= 0.4 mg/l
Mysid shrimp	-	96 h LC50= 0.93 mg/l
Crassostrea virginica (Eastern oyster)	-	96 h EC50= 0.84 mg/l (as Br2)

Ecological Toxicity Values for: **2,4-IMIDAZOLIDINEDIONE, 1-BROMO-3-CHLORO-5,5-DIMETHYL**

Oncorhynchus mykiss (rainbow trout)	-	static test 96 h LC50 = 0.40 mg/l
Lepomis macrochirus (Bluegill sunfish)	-	static test 96 h LC50 = 0.46 mg/l
Cyprinodon variegatus (sheepshead minnow)	-	flow-through test 96 h LC50 = 1.2 mg/l
Daphnia magna (Water flea)	-	static test 48 h EC50= 0.75 mg/l
Opossum Shrimp	-	flow-through test 96 h LC50= 0.92 mg/l
Crassostrea virginica (Eastern oyster)	-	flow-through test 96 h EC50= 1.1 mg/l
Colinus virginianus (Bobwhite quail)	-	Oral LD50 = 1,839 mg/kg
Colinus virginianus (Bobwhite quail)	-	Dietary LC50 > 5,620 ppm
Anas platyrhynchos (Mallard duck)	-	Dietary LC50 > 5,000 ppm

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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001. As a hazardous solid waste, it must be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : not applicable

14. TRANSPORT INFORMATION

Land (US DOT): UN3085 OXIDIZING SOLID, CORROSIVE, N.O.S. (HALOGENATED HYDANTOINS) 5.1 8 III
Water (IMDG): UN3085 OXIDIZING SOLID, CORROSIVE, N.O.S., (HALOGENATED HYDANTOINS) 5.1 8 III MARINE POLLUTANT

Air (IATA): UN3085 OXIDIZING SOLID, CORROSIVE, N.O.S., (HALOGENATED HYDANTOINS) 5.1 8 III

Emergency Response Guide Number: ERG # 140

Transportation Notes: Material is not regulated as a marine pollutant for ground, rail car, or aircraft transportation within the USA if shipped in non bulk packages per marine pollutant exception 49 CFR 171.4(c).

EMS: F-A, S-Q

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): This is an EPA registered pesticide.
EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes

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consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health	Immediate (Acute) Health Hazard
Physical	Fire Hazard

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302	TPQ (threshold planning quantity)	None established
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Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA	Reportable quantity	None established
ZUS_SAR302	Reportable quantity	None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313	De minimis concentration	None established
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Clean Air Act Toxic ARP Section 112r:

CAA 112R	None established
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Clean Air Act Socmi:

HON SOC	None established
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Clean Air Act VOC Section 111:

CAA 111	None established
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Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP	None established
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ZUS_CAAHRP	None established
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CAA AP	None established
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State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
ZUSCA_P65	None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS :
 SECTIONS REVISED: 14
 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. .