

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 SDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: **QUANTUM QB BRITE**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Quantum Biochemical 1400 Bluegrass Lakes Parkway , Alpharetta, GA, 30004 USA	REVISION DATE: 05/26/2015 SUPERCEDES: 12/04/2007
Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com	MSDS Number: 000000024385 SYNONYMS: CHEMICAL FAMILY: None DESCRIPTION / USE: None established FORMULA: None established

Manufacturer
Advantis Technologies
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004
United States of America

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Oxidizing solids	:	Category 1
Skin corrosion	:	Category 1B
Serious eye damage	:	Category 1
Respiratory sensitisation	:	Category 1
Skin sensitisation	:	Category 1
Reproductive toxicity	:	Category 1B
Specific target organ toxicity -	:	Category 3 (Respiratory system)

QUANTUM QB BRITE

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single exposure

GHS Label element

Hazard pictograms



Signal word

: Danger

Hazard statements

: H271 May cause fire or explosion; strong oxidiser.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H360 May damage fertility or the unborn child.

Precautionary statements

: **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat.
 P220 Keep/Store away from clothing/ combustible materials.
 P221 Take any precaution to avoid mixing with combustibles.
 P260 Do not breathe dust or mist.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P283 Wear fire/ flame resistant/ retardant clothing.
 P285 In case of inadequate ventilation wear respiratory protection.
Response:
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
 P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
 P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
POTASSIUM PEROXYMONOSULFATE	10058-23-8	35 - 45
POTASSIUM SULFATE	7778-80-5	23 - 33
POTASSIUM BISULFATE	7646-93-7	18 - 24
POTASSIUM PEROXYDISULFATE	7727-21-1	1 - 4
Sodium tetraborate pentahydrate	12179-04-3	1 - 4
MAGNESIUM CARBONATE	546-93-0	1 - 3

SECTION 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: 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.

SECTION 5. FIREFIGHTING 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. May intensify fire; oxidiser.
Extinguishing Media: Water
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.

SECTION 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: 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.

SECTION 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. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Storage of large masses of "OXONE" or blended "OXONE" should not exceed a 4 ft. (1.2m) cube.
Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."

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

SECTION 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 : Wear a NIOSH approved respirator if levels above the exposure limits are possible., A NIOSH approved air purifying respirator with dust/mist filter.

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

Eye Protection: Chemical resistant goggles must be worn. Face-shield

Protective Clothing Type: Impervious, Neoprene, Butyl rubber

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

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
POTASSIUM PEROXYDISULFATE (7727-21-1) [as persulfate]	TWA	0.1 mg/m ³	ACGIH (02 2014)
Sodium tetraborate pentahydrate (12179-04-3)	TWA	2 mg/m ³	ACGIH (02 2014)
	STEL	6 mg/m ³	ACGIH (02 2014)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid
Form: granular
Color: purple
Odor: none
Molecular Weight: None established
pH : No data.
Boiling Point: no data available

Melting point/freezing point: no data available
Bulk Density: ()
no data available
Vapor Pressure: no data available
Vapor Density: Not volatile

Viscosity:	Not applicable no data available
Solubility in Water:	250 g/l 68 °F (20 °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 This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.
HAP Content	

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions.
Conditions to Avoid:	Heat, Exposure to moisture
Chemical Incompatibility:	Oxidizing agents, Heavy metal salts, Cyanides, Halides
Hazardous Decomposition Products:	Oxygen, Heat, Other hazardous decomposition products may be formed.
Decomposition Temperature:	No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

POTASSIUM BISULFATE	LD50 = 2,340 mg/kg	Rat
Sodium tetraborate pentahydrate	LD50 3,200 - 3,400 mg/kg =	Rat

Component Animal Toxicology

Dermal LD50 value:

Sodium tetraborate pentahydrate	LD50 > 2,000 mg/kg	Rabbit
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Component Animal Toxicology

Inhalation LC50 value:

Sodium tetraborate pentahydrate	Inhalation LC50 4 h >	2 mg/l	Rat
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Product Animal Toxicity

<u>Oral LD50 value:</u>	Believed to be > 2,000 mg/kg
<u>Dermal LD50 value:</u>	Believed to be > 2,000 mg/kg

Inhalation LC50 value: No data.
 Skin Irritation: Corrosive to skin
 Eye Irritation: Corrosive to eyes
 Skin Sensitization: Possible skin sensitizer based on animal tests

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.

Sodium tetraborate pentahydrate Boric acid has been evaluated in several laboratory animal species and in only one species was found to cause fetotoxicity at maternally toxic doses. Based on this data, this product may have the potential to cause 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.

SECTION 12. ECOLOGICAL INFORMATION

Overview: There is no data available for this product.

Ecological Toxicity Values for: POTASSIUM SULFATE

Lepomis macrochirus (Bluegill sunfish) - 96 hr. EC50 (cell growth inhibition) 96 h LC50 = 3,550 mg/l
 Pimephales promelas (fathead minnow) - 96 h LC50 = 680 mg/l
 Daphnia magna (Water flea) - 48 h EC50= 720 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

Ecological Toxicity Values for: Sodium tetraborate pentahydrate

Rainbow trout (embryo - larval stage) - 24 day LC50 (chronic toxicity) = 88 mg/l
 Daphnia magna, - 24 h EC50= 242 mg/l

Green algae (*Scenedesmus subspicatus*) - 96 h EC10 = 24 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

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

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

SECTION 14. TRANSPORT INFORMATION

DOT

UN number : 3260
 Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.
 : (Potassium hydrogenperoxomonosulphate)
 Class : 8
 Packing group : II
 Labels : 8
 Emergency Response : 154
 Guidebook Number

TDG

UN number : 3260
 Description of the goods : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
 : (Potassium hydrogenperoxomonosulphate)
 Class : 8
 Packing group : II
 Labels : 8

IATA

UN number : 3260
 Description of the goods : Corrosive solid, acidic, inorganic, n.o.s.
 : (Potassium hydrogenperoxomonosulphate)
 Class : 8

Packing group : II
Labels : 8
Packing instruction (cargo aircraft) : 863
Packing instruction (passenger aircraft) : 859
Packing instruction (passenger aircraft) : Y844

IMDG-CODE

UN number : 3260
Description of the goods : CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
(Potassium hydrogenperoxomonosulphate)
Class : 8
Packing group : II
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B

SECTION 15. REGULATORY INFORMATION

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

SARA 302

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

SARA 313

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

Clean Air Act

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

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

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

Clean Water Act

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

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

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

US State Regulations

Massachusetts Right To Know

Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3
Magnesium carbonate	546-93-0

Pennsylvania Right To Know

Potassium hydrogenperoxomonosulph ate	10058-23-8
Potassium sulfate	7778-80-5
Potassium hydrogensulphate	7646-93-7
Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3

New Jersey Right To Know

Potassium hydrogenperoxomonosulph ate	10058-23-8
Potassium sulfate	7778-80-5
Potassium hydrogensulphate	7646-93-7
Dipotassium peroxodisulphate	7727-21-1
Sodium tetraborate pentahydrate	12179-04-3
Magnesium carbonate	546-93-0

California Prop 65

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

The components of this product are reported in the following inventories:

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

: Borax, 5 mole

: Nalco 9908

Inventories

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

SECTION 16. OTHER INFORMATION

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

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