FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: ROBARB POOL SPECIALTIES TILE BUSTER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier Robarb 1400 Bluegrass Lakes Parkway, Alpharetta, GA, 30004 USA

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

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

REVISION DATE: SUPERCEDES:

05/26/2015 06/26/2009

MSDS Number: 00000024479 SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA:

А

None None established None established

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification		
Corrosive to metals	:	Category 1
Acute toxicity (Inhalation)	:	Category 4
Skin corrosion	:	Category 1
Serious eye damage	:	Category 1

GHS Label element

SAFETY DATA SHEET

Hazard pictograms	
Signal word	: Danger
Hazard statements	 H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled.
Precautionary statements	 Prevention: P234 Keep only in original container. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face 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. P312 Call a POISON CENTER or doctor/ physician if you feel unwell. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage. Margen P405 Store locked up. P406 Store in corrosive resistant stainless steel container with a resistant inner liner. Disposal P501 Dispose of contents/ container to an approved waste disposal plant.
Other hazards None known.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME SULFURIC ACID	<u>CAS #</u> 7664-93-9	<u>% RANGE</u> 10 - 16
PHOSPHORIC ACID	7664-38-2	5 - 11
Thickener	70750-46-8	2-3
SODIUM CHLORIDE	7647-14-5	1 - 3
HYDROCHLORIC ACID	7647-01-0	0-3

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.
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.
Notes to Physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIREFIGHTING 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: Extinguishing Media:	0 - Will not burn 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
Hazardous Combustion Products:	equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

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:	Hazardous concentrations in air may be found in local spill area and immediately downwind.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.

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: <u>Protective Equipment for Ro</u>	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.
Flotective Equipment for Ro	
Respiratory Protection :	Wear a NIOSH approved respirator if levels above the exposure limits are possible., A NIOSH approved full-face or half-face respirator in combination with chemical goggles., A NIOSH approved full-face air purifying respirator with acid gas cartridge and 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 Boots Apron A full impervious suit is recommended if exposure is possible to a large portion of the body.
Eye Protection: Protective Clothing Type: General Protective Measures:	Chemical resistant goggles must be worn. Face-shield impervious clothing 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)
SULFURIC ACID (7664-93-9)	TWA	0.2 mg/m3	ACGIH (02 2014)
PHOSPHORIC ACID (7664-38-2)	TWA	1 mg/m3	ACGIH (02 2014)
	STEL	3 mg/m3	ACGIH (02 2014)
HYDROCHLORIC ACID (7647-01-0)		2 ppm	ACGIH (02 2014)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Form Color: Odor: Molecular Weight: pH :	liquid No data. No data. No data. None established 0.0 - 2.0
Boiling Point:	() 212 °F (100 °C)
Melting point/freezing point	No data
Bulk Density:	() no data available

Vapor Pressure: Vapor Density:	no data available > 1
Viscosity:	no data available
Solubility in Water: Partition coefficient n-	soluble in cold water No data
octanol/water:	
Evaporation Rate:	No data
Oxidizing:	None established
Volatiles, % by vol.:	no data available
VOC Content	This product does not contain any chemicals listed under the U.S.
	Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40
	CFR 60.489). This product does not contain any VOC exemptions
	listed under the U.S. Clean Air Act Section 450.
HAP Content	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Chemical Incompatibility: Oxidizing agents, Amines, Metals, alkalis	Stability and Reactivity Summary:	Stable under normal conditions.
Hazardous Decomposition Products: Hydrogen chloride	Conditions to Avoid:	Heat, Avoid freezing.

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxico Oral LD50 value:	<u>ology</u>		
SULFURIC ACID	LD50	= 2,140 mg/kg	Rat
PHOSPHORIC ACID	LD50	= 1,530 mg/kg	Rat
SODIUM CHLORIDE	LD50	= 3,000 mg/kg	Rat
HYDROCHLORIC ACID	LD50	900 mg/kg Ra	abbit
Component Animal Toxico	ology		
SULFURIC ACID	LD50	> 2,000 mg/kg	Rabbit
PHOSPHORIC ACID	LD50	= 2,740 mg/kg	Rabbit
SODIUM CHLORIDE	LD50	> 10,000 mg/kg	Rabbit
HYDROCHLORIC ACID	No da	ata	
Component Animal Toxico	ology		
SULFURIC ACID	LC50	1 h (aerosol) =	1.02 mg/l Rat

PHOSPHORIC ACID Inhalation LC50 1 h > 0.850 mg/l Rat

SODIUM CHLORIDE	Inhalation LC50 1 h	> 42 mg/l Rat	
HYDROCHLORIC ACID	Inhalation LC50 1 h	3124 ppm Rat	
Dermal LD50 value:	LD50 Believed to be > LD50 Believed to be > LC50 1 h Believed to		
Skin Irritation: Eye Irritation:	Corrosive to skin Corrosive to eyes Not believed to be sens	itising to skin.	
	irritation to mucous men	e to all tissues contacted and upon inhalation, may cause nbranes and respiratory tract. o cause subchronic or chronic toxicity.	
Toxicity:	·		
Reproductive and Developmental Toxicity:	Not known or repo	rted to cause reproductive or developmental toxicity.	
SULFURIC AC	ID	This product did not cause reproductive or developmental effects in a study with laboratory animals.	
PHOSPHORIC ACID This material has been tested and was found not to cause reproductive toxicity in laboratory animals.			
Mutagenicity:	Not known or repo	rted to be mutagenic.	
SULFURIC AC	ID	This product has been tested for mutagenicity. Tests revealed both positive and negative results. Based on the weight of evidence, we judge this product NOT to be a mutagenic hazard.	
		This product was determined to be non-mutagenic in the Ames assay.	
HYDROCHLORIC ACID		This chemical has been shown to be non-mutagenic based on a battery of assays.	
Carcinogenicity:	source including IA Research on Canc that occupational e	known or reported to be carcinogenic by any reference ARC, OSHA, NTP or EPA. The International Agency for er (IARC) has determined that there is sufficient evidence exposure to strong inorganic acid mists containing sulfuric c (Group I carcinogen). The following data is available for	
		This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA. IARC evaluated several epidemiology studies where workers from a variety of industries had been exposed to a mixture of strong inorganic acid mists. IARC has concluded that there is sufficient evidence that occupational exposure to a	

	mixture of strong inorganic-acid mists containing sulfuric acid is carcinogenic to humans (Group I carcinogen). Because cancer has not been observed in animals when they are exposed only to sulfuric acid mists, exposure to sulfuric acid by itself was not determined to be carcinogenic to humans.
PHOSPHORIC ACID	This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.
HYDROCHLORIC ACID	The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to Its Carcinogenicity to Humans.

SECTION 12. ECOLOGICAL INFORMATION

Overview: Slightly toxic to fish and other aquatic organisms.

Ecological Toxicity Values - Product:

EC50 Believed to be approximately 23 mg/l (calculated)

Ecological Toxicity Values for: SULFURIC ACID

Mosquito fish Bluegill sunfish Common shrimp (Crangon crangon)	-	(nominal, static). 96 h LC50 42 mg/l 96 h LC50 10.5 mg/l (nominal, renewal). 48 h LC50 70-80 mg/l
Daphnia magna,	-	24 h EC50 29 mg/l

Ecological Toxicity Values for: PHOSPHORIC ACID

Mosquito fish - 96 h LC50 138 mg/l

Ecological Toxicity Values for: HYDROCHLORIC ACID

Mosquito fish	-	96 h LC50 = 282 mg/l
Bluegill	-	48 h LC50 = 3.6 mg/l
Pimephales promelas (fathead	-	96 h LC50 = 21.9 mg/l
minnow)		
Common shrimp (Crangon	-	(nominal, renewal). 48 h LC50= 260 mg/l
crangon)		
Daphnia magna,	-	48 h EC50= 0.492 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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D002.As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT UN number Description of the goods Class Packing group Labels Emergency Response Guidebook Number	 1760 Corrosive liquids, n.o.s. (Sulphuric acid, phosphoric acid) 8 II 8 154
TDG UN number Description of the goods Class Packing group Labels	 1760 CORROSIVE LIQUID, N.O.S. (Sulphuric acid, phosphoric acid) 8 II 8
IATA UN number Description of the goods Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) Packing instruction (passenger aircraft)	 1760 Corrosive liquid, n.o.s. (Sulphuric acid, phosphoric acid) 8 II 8 855 851 Y840

IMDG-CODE		
UN number	:	1760
Description of the goods	:	CORROSIVE LIQUID, N.O.S.
		(Sulphuric acid, phosphoric acid)
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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulphuric acid	7664-93-9	1000	

SARA 302

The following components are subject to reporting levels established by SARA Title III, Section 302:

Sulphuric acid 7664-93-9 hydrochloric acid 7647-01-0

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulphuric acid	7664-93-9
hydrochloric acid	7647-01-0

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

hydrochloric acid 7647-01-0 1.85 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

Sulphuric acid	7664-93-9	13.95 %
hydrochloric acid	7647-01-0	1.85 %

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

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Sulphuric acid	7664-93-9	13.95 %
phosphoric acid	7664-38-2	8.5 %
hydrochloric acid	7647-01-0	1.85 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sulphuric acid	7664-93-9	13.95 %
phosphoric acid	7664-38-2	8.5 %
hydrochloric acid	7647-01-0	1.85 %

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

	Sulphuric acid phosphoric acid hydrochloric acid	7664-93-9 7664-38-2 7647-01-0
Pennsylvania Right To Know		
	Sulphuric acid phosphoric acid hydrochloric acid	7664-93-9 7664-38-2 7647-01-0
New Jersey Right To Know		
	Sulphuric acid phosphoric acid hydrochloric acid	7664-93-9 7664-38-2 7647-01-0

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.
		dye Pylaklor Acid Red LX-6515 Rewoteric AM

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:	
Major References :	

First formulated version in SAP. Available upon request.

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