SAFETY DATA SHEET

Revision Date 08-May-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name Aqua Guard Calcium Hardness Reducer

Other means of identification

Product Code 26288845046

UN/ID no. 3265

Recommended use of the chemical and restrictions on use
Recommended Use Swimming Pool Product.
Uses advised against Do not mix with other chemicals

Details of the supplier of the safety data sheet

Manufacturer Address KIK Pool Additives Inc 5160 East Airport Drive Ontario, California 91761

Emergency telephone number

Emergency Telephone Poison Control Center (Medical): (866) 366-5048

Chemtrec (Transportation) 1-800-424-9300, 703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage



Color red Physical state liquid Odor characteristic

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Store in a dry place. Store in a closed container.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

0.002704% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical Name	CAS No.	Weight-%
etidronic acid	2809-21-4	15 - 25*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove to fresh air. Call a physician or poison control center immediately.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a

physician or poison control center immediately.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid

contact with skin, eyes or clothing.

Environmental precautions

Environmental precautionsDo not allow into any sewer, on the ground or into any body of water. Should not be

released into the environment. Prevent further leakage or spillage if safe to do so. Prevent

product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upDike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take

up mechanically, placing in appropriate containers for disposal. Clean contaminated surface

thoroughly. Prevent product from entering drains.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed

systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in

properly labeled containers.

Incompatible materials Incompatible with oxidizing agents. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep

away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing

and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance aqueous solution Odor characteristic

ColorredOdor thresholdNo information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 0-1

Melting point/freezing point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)

No information available
No information available
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure

No information available
No information available
No information available

Vapor densityNo information availableSpecific GravityNo information availableWater solubilityNo information availableSolubility in other solventsNo information availablePartition coefficientNo information availableAutoignition temperatureNo information available

Autoignition temperature No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available Density No information available **Bulk density** No information available **Explosive properties** No information available Oxidizing properties No information available

Other Information

Softening pointNo information availableMolecular weightNo information availableVOC Content (%)No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Do not mix with other chemicals.

Incompatible materials

Incompatible with oxidizing agents. Bases.

Hazardous Decomposition Products

No information available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists.

Eye contact Avoid contact with eyes. May cause burns.

Skin contact Avoid contact with skin. May cause burns.

Ingestion May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
etidronic acid	= 2400 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
2809-21-4			

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw

necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.

Possible risk of irreversible effects.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

0.0027% of the mixture consists of components(s) of unknown hazards to the aquatic environment

5.0027 % of the mixture consists of components(s) of unknown mazards to the aquatic environment			
Chemical Name	Algae/aquatic plants	Fish	Crustacea
etidronic acid	-	868: 96 h Lepomis macrochirus	527: 48 h Daphnia magna mg/L

2809-21-4	mg/L LC50 static 360: 9	6 h EC50
	Oncorhynchus mykiss mg/l	LC50
	static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
etidronic acid	3.49
2809-21-4	

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

Note: Limited quantity (LQ) exception is possible

DOT

UN/ID no. 3265

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID)

Hazard Class 8
Packing Group ||

Description UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID), 8, III

<u>IATA</u>

UN/ID no. 3265

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID)

Hazard Class 8
Packing Group

Description UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID), 8, III

IMDG

UN/ID no. 3265

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID)

Hazard Class 8
Packing Group III

Description UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETIDRONIC ACID), 8, III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazardYesChronic Health HazardYesFire hazardNoSudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number This product does not contain any substances regulated as pesticides

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 3 Flammability 0 Instability 0 Physical and Chemical

Properties -

Prepared ByRegulatory AffairsRevision Date08-May-2015

Revision Note No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet