Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 05/15/2014 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

1" CHLORINATING TABLETS (95% TRICHLORO) - ALL BRANDS Trade name

Product form

12 Relevant identified uses of the substance or mixture

Use of the substance/mixture : Pool care

Details of the supplier of the safety data sheet

KIK Pool Additives Inc. 5160 E Airport Dr. Ontario, CA 91761 Telephone: (909) 390-9912

Fax: (909) 390-9911

Emergency telephone number

: Transportation Emergency: (800) 424-9300 / Medical Emergency: (866) 366-5048 **Emergency number**

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification (GHS-US)

Ox. Sol. Not classified ** Acute Tox. 2 H330 (Inhalation:dust mist) Acute Tox. 4 (Oral) H302 Eye Irrit. 2A H319 STOT SE 3 H335

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

P261 - Avoid breathing dust Precautionary statements (GHS-US)

P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, protective clothing, protective gloves

P330 - If swallowed, rinse mouth

P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention

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

P405 - Store locked up

P501 - Dispose of contents/container to licensed waste handling facility.

Other hazards

No additional information available

Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

Not applicable

^{*}Product does not meet GHS criteria for Oxidizing Solid (tested according to the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Test O.1: Test for Oxidizing Solids)

^{**}Product as sold is not expected to produce respiratory effects. Particles of respirable size are generally not encountered. The respirable fraction is typically less than 0.15% by weight.

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3.2. Mixture

Name	Product identifier	%
Trichloro-S-triazinetrione	(CAS No) 87-90-1	>= 95

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice

(show the label where possible).

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER or doctor/physician.

First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). If skin irritation or

rash occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15

minutes minimum). If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON

CENTER/doctor/physician if you feel unwell.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes serious eye irritation. Harmful if swallowed. Irritation of respiratory tract.

Symptoms/injuries after inhalation : May cause headache, nausea and irritation of respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation, nausea, vomitting, and diarrhea if swallowed.

Chronic symptoms : Possible respiratory damage following repeated or prolonged inhalation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Flood with plenty of water.

Unsuitable extinguishing media : Do not use : dry chemicals, carbon dioxide, halogenated, or ABC fire extinguishers/agents.

5.2. Special hazards arising from the substance or mixture

Fire hazard : May cause fire or explosion; strong oxidizer.

Explosion hazard : Explosion risk in case of fire. Contact with ammonia, ammonium salts, urea, or similar nitrogen-

containing compounds may form nitrogen trichloride (highly explosive).

Reactivity : Highly reactive oxidizing and chlorinating agent.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews

properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air

respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Sweep or shovel spills into appropriate container for disposal. Prevent entry to sewers and public

waters.

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Methods for cleaning up

Sweep or shovel spills into appropriate container for disposal. Do not mix spilled material with other materials if possible. DO NOT seal containers especially containing wet or contaminated material. Contact supplier in Section 1 for further instructions especially for damp or contaminated material. Dispose of material in compliance with local, state, and federal regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide appropriate exhaust ventilation at places of dust forming. Keep away from sources of ignition - No smoking. Avoid breathing dust. Take any precaution to avoid mixing with ammonia, ammonium salts, urea or similar nitrogen containing compounds.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : moisture and heat sources. Keep container closed when not in use.

Incompatible products

: Strong bases. Ammonia. ammonium salts. Urea or similar nitrogen containing compounds.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Personal protective equipment : Face shield. Gloves. Protective goggles. Respiratory protection of the dependent type.









Hand protection

: Protective gloves made of rubber.

Eye protection

: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to handling, use or airborne particles.

Skin and body protection

: Wear long sleeves.

Respiratory protection

: In case of inadequate ventilation wear respiratory protection. In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid **Appearance** · Tablet White Color Chlorine-like. Odor Threshold No data available : No data available pН : 2.7 - 2.9 (1% solution) pH solution Relative evaporation rate (butyl acetate=1) No data available Melting point No data available : No data available Freezing point **Boiling point** : No data available Flash point No data available Self ignition temperature : No data available

Decomposition temperature : 225 °C

Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : > 1

Density : 1.16 - 1.9 g/cm³

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Solubility Water: 1.2 % Log Pow : No data available Log Kow No data available Viscosity, kinematic No data available Viscosity, dynamic : No data available Explosive properties : No data available : No data available Oxidizing properties : No data available **Explosive limits**

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly reactive oxidizing and chlorinating agent.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Violently oxidises organic material. Reacts with (some) acids: release of (highly) toxic gases/vapors (chlorine). Contact with ammonia, ammonium salts, urea, or similar nitrogen-containing compounds may form nitrogen trichloride (highly explosive).

10.4. Conditions to avoid

Sparks. Heat. Open flame.

10.5. Incompatible materials

Avoid contact with strong reducing agents. Contact with most foreign material, organic matter, or easily chlorinated or oxidized materials may result in fire. Avoid oil, grease, sawdust, floor sweepings, other easily oxidized organic compounds. . Contact with water releases hypochlorous acid.

10.6. Hazardous decomposition products

Thermal decomposition generates : Chlorine

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

" CHLORINATING TABLETS (95% TRICHLORO) - ALL BRANDS	
LD50 oral rat	809 mg/kg (Source: NLM_CIP)
LD50 dermal rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l/4h)	0.09 – 0.29 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause headache, nausea and irritation of respiratory tract.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation, nausea, vomitting, and diarrhea if swallowed.

Chronic symptoms : Possible respiratory damage following repeated or prolonged inhalation.

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SECTION 12: Ecological information

12.1. **Toxicity**

: Very toxic to aquatic life with long lasting effects. Ecology - general

12.2. Persistence and degradability

1" CHLORINATING TABLETS (95% TRICHLORO) - ALL BRANDS	
Persistence and degradability	No information available.

12.3. Bioaccumulative potential

1" CHLORINATING TABLETS (95% TRICHLORO) - ALL BRANDS	
Bioaccumulative potential	No information available.

12.4. Mobility in soil

1" CHLORINATING TABLETS (95% TRICHLORO) - ALL BRANDS	
Ecology - soil	No data available.

Other adverse effects 12.5.

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Do not discharge to public wastewater systems without permit of pollution control authorities. No

discharge to surface waters is allowed without an NPDES permit.

Dispose in a safe manner in accordance with local/national regulations. Do not allow the product Waste disposal recommendations

to be released into the environment.

SECTION 14: Transport information

UN proper shipping name

Ground (US DOT) Not regulated for ground transportation. Product does not meet GHS criteria for Oxidizing Solid

(tested according to the UN Recommendations on the Transport of Dangerous Goods, Manual of

Tests and Criteria, Test O.1: Test for Oxidizing Solids)

Water (IMDG) UN3077 ENVIRONMENTAL HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(TRICHLOROISOCYANURIC ACID) 9, III MARINE POLLUTANT Air (IATA)

Ships by water (IMDG) as Limited Quantity when individual/inner packaging is or less than II lbs (5 kg) and case/outer packaging is or less than 66 lbs (30 kg). Ships by Air (IATA) as Limited

Quantity when gross package is less than 66 lbs (30kg).

Additional information

Other information

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Air transport

CFR 175.75)

DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

SECTION 15: Regulatory information

15.1. US Federal regulations

AQUA GUARD 1" CHLORINATING TABLETS		
All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	

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15.2. International regulations

CANADA

Trichloro-S-triazinetrione (87-90-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

No additional information available

15.2.2. National regulations

Trichloro-S-triazinetrione (87-90-1)

Listed on the AICS (the Australian Inventory of Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

Listed on Inventory of Existing Chemical Substances (IECSC)

Listed on the Korean ECL (Existing Chemical List) inventory.

Listed on New Zealand - Inventory of Chemicals (NZIoC)

Listed on Inventory of Chemicals and Chemical Substances (PICCS)

15.3. US State regulations

Trichloro-S-triazinetrione (87-90-1)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Indication of changes : Revision 1.0 – 18 Dec 2013 - New SDS Created.

Other information : Author. JAH.

NFPA health hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 2 - Normally unstable and readily undergo violent

decomposition but do not detonate. Also: may react violently with water or may form potentially explosive

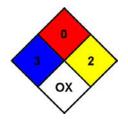
mixtures with water.

NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can

greatly increase the rate of combustion/fire. This material is

an NFPA class 1 oxidizer.





This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.