



SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 02/24/2021

Version 2.5

SECTION 1. Identification

Product identifier

Product number	K100-0118QC
Product name	Total Chlorine Positive Control Kit, CAS-No. 7080-50-4

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Reagent for analysis
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Details of the supplier of the safety data sheet

Company	RPC
	1643 Modern Court
	Tucson, AZ 85705
	1-520-888-5551

Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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SECTION 2. Hazards identification

GHS Classification

Acute toxicity, Category 4, Oral, H302
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Respiratory sensitization, Category 1, H334
For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-Labeling

Hazard pictograms



Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

P260 Do not breathe dusts or mists.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P285 In case of inadequate ventilation wear respiratory protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula	$\text{CH}_3\text{C}_6\text{H}_4\text{SO}_2\text{NCINa} \cdot 3 \text{H}_2\text{O}$ $\text{C}_7\text{H}_7\text{CINaNO}_2\text{S} \cdot 3 \text{H}_2\text{O}$ (Hill)	$\text{C}_7\text{H}_7\text{CINaNO}_2\text{S} \cdot 3 \text{H}_2\text{O}$
Molar mass	281.69 g/mol	

Hazardous ingredients

Chemical name (Concentration)

CAS-No.

Chloramine T trihydrate (>= 90 % - <= 100 %)

7080-50-4

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

General advice

First aider needs to protect himself.

Inhalation

After inhalation: fresh air. Call in physician.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

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Eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Ingestion

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Call a physician immediately. Do not attempt to neutralize.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Irritation and corrosion, Allergic reactions, Cough, Shortness of breath
Risk of blindness!

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Combustible.

In the event of decomposition: danger of explosion!

Development of hazardous combustion gases or vapors possible in the event of fire.

Fire may cause evolution of:

Sulfur oxides, Hydrogen chloride gas, nitrogen oxides

Advice for firefighters

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

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Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Work under hood. Do not inhale substance/mixture.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at +2°C to +8°C (+36°F to +46°F).

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

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This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment:

protective clothing

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

Physical state	solid
Color	light yellow
Odor	slight chlorine
Odor Threshold	No information available.
pH	8 - 10 at 50 g/l 68 °F (20 °C)
Melting point	decomposes
Boiling point/boiling range	Not applicable
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	No information available.
Relative density	No information available.

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Water solubility	150 g/l at 77 °F (25 °C)
Partition coefficient: n-octanol/water	log Pow: 0.84 (calculated) (anhydrous substance) Bioaccumulation is not expected. (Lit.)
Autoignition temperature	No information available.
Decomposition temperature	> 140 °F (> 60 °C)
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Bulk density	540 - 680 kg/m ³

SECTION 10. Stability and reactivity

Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability

Sensitive to air.

Possibility of hazardous reactions

Generates dangerous gases or fumes in contact with:

Acids

Violent reactions possible with:

Strong oxidizing agents

Conditions to avoid

Heating (explosive decomposition).

Incompatible materials

no information available

Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

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Target Organs

Eyes
Respiratory system
Skin

Acute oral toxicity

LD50 Rat: 935 mg/kg (IUCLID)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Skin irritation

Rabbit
Result: Causes burns.
(IUCLID)

Causes burns.

Eye irritation

Causes serious eye damage.
Risk of blindness!

Sensitization

Human experience
Result: positive

(HSDB)

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Genotoxicity in vivo

Mutagenicity (mammal cell test): micronucleus.
Result: negative
(IUCLID)

Genotoxicity in vitro

Ames test
Result: negative
(IUCLID)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to fish

LC50 *Poecilia reticulata* (guppy): 31 mg/l; 96 h

OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

EC50 *Daphnia magna* (Water flea): 4.5 mg/l; 48 h (IUCLID)

NOEC *Daphnia magna* (Water flea): 1.1 mg/l; 21 d

OECD Test Guideline 202

Toxicity to algae

IC50 *Desmodesmus subspicatus* (green algae): 0.31 mg/l; 48 h (ECOTOX Database)

Persistence and degradability

Biodegradability

90 %; 28 d

OECD Test Guideline 301A

Readily biodegradable.

Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 0.84

(calculated)

(anhydrous substance) Bioaccumulation is not expected. (Lit.)

Mobility in soil

No information available.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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SECTION 14. Transport information

Land transport (DOT)

UN number	UN 2928
Proper shipping name	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (N-CHLORO-4-TOLUENESULFONAMIDE SODIUM SALT)
Class	6.1 (8)
Packing group	II
Environmentally hazardous	--

Air transport (IATA)

UN number	UN 2928
Proper shipping name	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (N-CHLORO-4-TOLUENESULFONAMIDE SODIUM SALT)
Class	6.1 (8)
Packing group	II
Environmentally hazardous	--
Special precautions for user	no

Sea transport (IMDG)

UN number	UN 2928
Proper shipping name	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (N-CHLORO-4-TOLUENESULFONAMIDE SODIUM SALT)
Class	6.1 (8)
Packing group	II
Environmentally hazardous	--
Special precautions for user	yes
EmS	F-A S-B

SECTION 15. Regulatory information

United States of America

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.

SARA 302

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

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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

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

California Prop 65 Components

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

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms



Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

EUH031 Contact with acids liberates toxic gas.

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Precautionary Statements

Prevention

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date: 02/24/2021

Version: 2.5

Revision changes: Formatting and update to GHS standard.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.