

1 Identification**Product identifier****Trade name:** QUATERNARY RINSE**Product Code:** 141819**Manufacturer/Supplier:**

Hydro-Chem Systems, Inc.
5550 Clay Avenue S.W.
Grand Rapids, MI 49548, U.S.A.
Tel: 1-800-666-1992 / Fax: 616-531-8692
www.hydrochemsystems.com

Information department: Chemical Department**Emergency telephone number:**

PERS: 1-800-633-8253 #9120 (Emergency Contact for Hazardous Materials Accidents, Spills, or Leaks Only)

2 Hazard(s) identification**Classification of the substance or mixture**

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS07

Signal word Warning**Hazard-determining components of labeling:**

Quaternary Ammonium Compound

Quaternary Ammonium Compound

Hazard statements

Causes skin irritation.

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

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

Wash thoroughly after handling.

Specific treatment (see on this label).

Take off contaminated clothing.

If skin irritation occurs: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water/...

Classification system:**NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

(Contd. on page 2)

USA



Safety Data Sheet acc. to OSHA HCS

Quaternary Rinse

Printing date 07/03/2014

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

(Contd. of page 1)

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

* 3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

	Quaternary Ammonium Chloride	10-25%
64-17-5	ethanol	≤ 2.5%

* 4 First-aid measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Maintain an ANSI approved eye wash station and safety shower in the immediate vicinity capable of delivering tepid water (60-100 degrees F) for 15 minutes.

After swallowing: Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

USA



Printing date 07/03/2014

Safety Data Sheet

acc. to OSHA HCS

Quaternary Rinse

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 2)

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
-----	--

REL	Long-term value: 1900 mg/m ³ , 1000 ppm
-----	--

TLV	Short-term value: 1880 mg/m ³ , 1000 ppm
-----	---

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

USA



Safety Data Sheet

acc. to OSHA HCS

Quaternary Rinse

Printing date 07/03/2014

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 3)

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Chemical Resistant, neoprene, nitrile, butyl rubber

Eye protection: Goggles recommended during refilling.

Body protection:

Apron Chemical Resistant; Rubber.

*

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid

Color: Clear

Odor: Characteristic

pH-value: Not determined.

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100 °C (212 °F)

Flash point: Not Determined.

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 470 °C (878 °F)

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

Density: Not determined.

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with

Water: Fully miscible.

Solvent content:

Organic solvents: 1.3 %

VOC content: 11.4 %

Other information No further relevant information available.

USA

(Contd. on page 5)



Printing date 07/03/2014

Safety Data Sheet

acc. to OSHA HCS

Quaternary Rinse

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 4)

* **10 Stability and reactivity**

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

* **11 Toxicological information**

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Quaternary Ammonium Compound

Oral	LD50	650 mg/kg (rat)
------	------	-----------------

Quaternary Ammonium Compound

Oral	LD50	400 mg/kg (rat)
------	------	-----------------

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

* **12 Ecological information**

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

(Contd. on page 6)

USA



Printing date 07/03/2014

Safety Data Sheet
acc. to OSHA HCS

Page 6/8

Quaternary Rinse

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 5)

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Dispose of in accordance with local and regional regulations.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

*

14 Transport information

UN-Number

DOT, ADR, ADN, IMDG, IATA

Not applicable

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Not applicable

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Not applicable

Packing group

DOT, ADR, IMDG, IATA

Not applicable

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation":

-

*

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All components of this product are listed on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

(Contd. on page 7)

USA



Printing date 07/03/2014

Safety Data Sheet
acc. to OSHA HCS

Page 7/8

Quaternary Rinse

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 6)

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

64-17-5 ethanol

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

64-17-5 ethanol

A3

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labeling:

Quaternary Ammonium Compound

Quaternary Ammonium Compound

Hazard statements

Causes skin irritation.

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

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

Wash thoroughly after handling.

Specific treatment (see on this label).

Take off contaminated clothing.

If skin irritation occurs: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water/...

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

DISCLAIMER: IMPORTANT: The information presented herein is believed to be reliable, and relates to the specific material listed and may not be valid for such material combined with other materials outside the scope of intended usage. No warranty of guarantee is made and it remains the user's responsibility to confirm by other investigation as to safe material application. The manufacturer shall not be liable for damage to person or property resulting from the use of this product. It is the customer's responsibility to investigate any potential allergic or health problems of all users.

(Contd. on page 8)

USA



Printing date 07/03/2014

Safety Data Sheet
acc. to OSHA HCS

Page 8/8

Quaternary Rinse

Reviewed and Updated on: 10/24/2013

Trade name: QUATERNARY RINSE

(Contd. of page 7)

Department issuing SDS: Chemical Department

Contact: Hydro-Chem Systems, Inc.

* Data compared to the previous version altered.

USA