NFPA	GHS Pictogram	Personal Protective Equipment
		 

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	Product form	Product code
Pro-Tek QT	Mixture	PT-QT

1.2. **Relevant identified uses of the substance or mixture and uses advised against:** Corrosion inhibitor for metal components of heat exchange systems. For industrial process water treating. Not for use on food contact surfaces.

1.3. Details of the supplier of the safety data sheet

Rhomar HTF LLC, dba Rhomar Water
2103 E. Rockhurst St., Springfield, MO 65802 USA
Telephone: 417-862-2600; Fax: 417-862-6410
Email: TalkToUs@RhomarWater.com; Website: www.RhomarWater.com

1.4. Emergency telephone number

CHEM TREC: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS Pictogram: 

Signal Word: **Warning!** Irritant (eye and skin)

Hazard Statement:

H316: Causes mild skin irritation (*Skin Corrosion/Irritation:* Category 3).
H320: Causes eye irritation (*Serious Eye Damage/Eye Irritation*: Category 2B).
H303: May be harmful if swallowed (*Acute Toxicity/Oral:* Category 5).
H313: May be harmful in contact with the skin (*Acute toxicity/Dermal:* Category 5)
H413: May cause long lasting effects to aquatic life (*Hazardous to aquatic life, long term hazard*: Category 4)

Precautionary Statements:

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 + P332 + P313: If skin irritation occurs or if eye irritation persists: Get medical advice/attention.
P312: Call a POISON CENTER/doctor/physician if you fell unwell.
P102: Keep out of reach of children.
P233 + P403: Keep the container tightly closed in a well ventilated place.
P410 + P412: Protect from sunlight. Do not to expose to temperatures exceeding 54 °C/130 °F
P273: Avoid release to the environment.
P501: Dispose of contents/container in accordance with applicable federal, state and local laws.

Reference: GHS Purple Book-Annex 3

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS #	Amount, %
Propylene glycol	57-55-6	20 - 30
Corrosion Inhibitors*	Blend*	6 - 11
Carboxylate polymer sodium salt	None Listed	1 - 3
Boric Acid	10043-35-3	1 – 2
Potassium hydroxide	1310-58-3	< 1
Blue dye, food grade	-	<0.01
Demineralized water	7732-18-5	Balance

*** The specific identities of the corrosion inhibitors is a Rhomar Water proprietary trade secret and have thus been withheld.**

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures**

General advice: If there exists a significant potential for exposure, refer to **Section 8** for personal protective equipment. Acute overexposure to Pro-Tek QT may be irritating to the eyes and skin. Its ingestion may be harmful.

Eye contact : Immediately flush thoroughly with plenty of water while lifting the lower and upper eyelids occasionally. Seek medical attention if eye irritation occurs.

Skin contact : Wash off with soap and plenty of water. Rinse thoroughly with water. Seek medical attention if irritation occurs. Remove and wash contaminated clothing before reuse.

Inhalation : Move to fresh air. If breathing stops, administer artificial respiration. If symptoms persist, call a physician immediately.

Ingestion : If person is conscious, give them large amounts of drinking water or milk to dilute the stomach contents. Do not induce vomiting. Consult physician

4.2. **Indication of any immediate medical attention and special treatment needed:** None

Note to Physician: Contains propylene glycol and alkaline corrosion inhibitors. Treat as symptoms may be.

SECTION 5: FIREFIGHTING MEASURES

NFPA

Flammability 0
Health 1

Stability and reactivity 0
Physical hazard -

5.1. **Suitable extinguishing media:** Non-combustible. Use extinguishing media appropriate for the surrounding fire.

5.2. **Unsuitable extinguishing media:** Not flammable.

5.3. **Special hazards arising from the substance or mixture:** Thermal decomposition may result in smoke which may contain harmful combustion products such as carbon monoxide and carbon dioxide among others

5.4. **Advise for firefighters:** Wear self-contained breathing apparatus (SCBA) which are NIOSH/MSHA approved (or equivalent) and full protective gear for firefighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures:** Evacuate unprotected people from area. Ensure adequate ventilation. Avoid breathing vapors or mist. Use safety glasses and impervious gloves as a minimum for personal protection. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION for more information.

6.2. **Environmental precautions:** Prevent spills from entering sewers, waterways, into soil and groundwater systems. Prevent further leakage if safe to do so. See Section 12, ECOLOGICAL INFORMATION for additional information.

6.3. **Methods and material for containment and cleaning:** Dam up the area of accidental release to contain large spills. Mechanically collect spillage in suitable containers for disposal. For small spills, adsorb with inert adsorbent material. For additional information, see Section 13, DISPOSAL CONSIDERATIONS.

SECTION 7: HANDLING AND STORAGE

7.1. **Precautions for safe handling**: Observe standard industrial hygiene practices. Proper personal protective equipment required while handling this product. Avoid contact with the eyes and prolonged or repeated skin contact. Avoid breathing mists or vapors. See Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION.

7.2. **Conditions for safe storage, including any incompatibilities**: Store in original container. Keep storage container tightly closed in a well ventilated place. Avoid storing Pro-Tek QT with strong acids and oxidizers. See Section 10, STABILITY AND REACTIVITY for more specific information.

7.3. **Specific end use(s)**: Apart from the uses mentioned in Section 1.2, no other specific uses are prescribed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Name	CAS #	OSHA PEL	ACGIH TLV
Potassium Hydroxide	1310-58-3	2 mg/m³, Ceiling	2 mg/m³, Ceiling
Boric Acid	10043-35-3	total dust): 15 mg/m³	10 mg/m³
Carboxylate Polymer, Sodium Salt	None Listed		
Propylene Glycol	57-55-6	Not Established	Not Established
Water	7732-18-5	Not Established	Not Established

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

8.1. **Exposure controls**

Eye/face protection : Wear dust and splash proof goggles or safety glasses with side shields.

Skin/body protection : Use gloves chemically resistant to this product such as those made from butyl or nitrile rubber when prolonged contact with material could occur. Wear impervious clothing.

Respiratory protection : Wear suitable personal respiratory protection and protective suit in case of mist, aerosol or spray exposure.

8.2. **Engineering controls** : Adequate ventilation should be ensured. Safety shower and eyewash station should be located in the immediate work place.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Liquid	**Specific Gravity (H_2O=1), g/mL**	1.07
Appearance	Clear	**Evaporation Rate (H_2O = 1)**	No data available
Odor	Slight odor	**Odor threshold**	No data available
pH (as is)	8.4 – 8.8	**Vapor Pressure**	No data available
pH of a 1% solution	8.0 – 8.5	**Vapor Density (Air = 1)**	No data available
Boiling Point, 760 mmHg	>100°C (>212°F)	**Relative density (Air = 1)**	1.04 g/mL
Freezing Point	-3.3 °C (26 °F)	**Partition Coefficient**	No data available
Decomposition temperature	No data available	**Water Solubility**	Complete
Oxidizing properties	No data available	**Flammability Limits (solid, gas)**	Not applicable to liquids
Flammability/explosive limit	No data available	**Autoignition Temperature**	No test data available
Viscosity @ 25 °C	10 – 20 cP	**Flash Point**	No data available

9.2. **Other information** : None available

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity** : No data available
10.2. **Chemical stability** : Stable under recommended storage and handling conditions
10.3. **Possibility of hazardous reactions**: Polymerization will not occur
10.4. **Conditions to avoid** : Exposing this product to elevated temperatures can cause it to decompose generating gases which can cause pressure buildup in closed systems.
10.5. **Incompatible materials** : Avoid contact with strong oxidizers and strong acids.
10.6. **Hazardous decomposition products**: None

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Chemical name	Exposure route	Test specimen	Lethal Dose (LD_{50})	Reference
Propylene glycol	Oral	Rat	8000-46000 mg/Kg	Literature
		Mouse	23000-24900 mg/Kg	
		Guinea pig	18000-20000 mg/Kg	
	Skin	Rabbit	Non-irritant	
	Eye	Rabbit	Non-irritant	
Boric Acid	Dermal	Rabbit	> 2000 m/Kg	
	Oral	Rat	3500 – 4100 mg/Kg	
Potassium hydroxide	Oral	Rat	273 mg/Kg	
Pro-Tek QT	Skin	Rat	> 5000 mg/Kg	
	Oral	Rat	> 5000 mg/Kg	
	Eye	No test data available		
	Respiratory			

Chronic effects

Short-term exposure: Irritating to the eyes. May be harmful if ingested.
Long-term exposure: Repeated exposure may cause permanent tissue damage
Symptoms associated with exposure: Redness, itching, burning (from least to the most severe)
Carcinogenicity : No ingredient of this product in levels ≥ 0.1% is identified and listed by OSHA, ACGIH, NTP, IARC or Mexico as a known or suspected carcinogen

Mutagenic, reproductive, developmental, target organ or neurological effects : No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. **Aquatic toxicity**

Chemical Name	Description of ecological effect
Pro-Tek QT	LC_{50} > 5,000 mL/L (24 hour; Goldfish); LC_{50} > 10,000 mg/L (48 hour; Guppy); LC_{50} > 10,000 mg/L (48 hour; Water flea)

12.2. **Persistence and degradability**: Expected to biodegrade
12.3. **Bioaccumulative potential** : Not expected to bio-accumulate
12.4. **Mobility in soil** : Mobility potential of product is likely to be high due to its 100 % miscibility in water
12.5. **Other adverse effects** : None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Unused/uncontaminated product**: Contact a licensed: Recycler. Reclaimer. Incinerator.

13.2 **Waste disposal methods**: Whenever possible, minimize waste. Waste should be disposed of in accordance with all laws and regulations pertaining to this product in your area of jurisdiction.

13.3 **Contaminated packaging**: Decontaminate empty containers. Treat decontamination fluid as waste and dispose as above. You may take the containers for local recycling.

13.4 **Physical properties that may affect disposal activities**: Pro-Tek QT doesn't meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity and none of its ingredients are listed in 40 CFR 261.33

13.5 **Chemical properties that may affect disposal activities**: Toxicity Characteristic Leaching Procedures (TCLP) has not been performed on Pro-Tek QT.

NOTE: Do not dump into any sewers, on the ground, or into any water body. All disposal practices must be in compliance with all federal, state/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are solely the responsibility of the waste generator.

SECTION 14: TRANSPORT INFORMATION

International Transport regulations: This product is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

Domestic Transport regulations : **DOT (USA)** - Not regulated; **TDG (Canada)** - Not regulated; **MEX (Mexico)** - Not regulated. Pro-Tek QT is non-hazardous by DOT standards.

NOTE: This information is not intended to convey all specific regulatory or operational requirements relating to the transportation of this product. Additional transportation information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of this material.

SECTION 15: REGULATORY INFORMATION

US Federal regulations

CERCLA Section 102 (a): Hazardous substances: Potassium hydroxide (CAS No. 1310-58-3), 1-3 % by weight. Reportable quantity 1000 lbs.

SARA 313: This product does not contain any components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312: Acute health hazard: No
Chronic health hazard: No

SARA 302: This product is not known to contain any chemical components subject to the reporting requirements of SARA Title III, Sections 302 or regulations contained in 40 CFR 302.

15.2. **US State regulations**

Pennsylvania Worker and Community-Right-To-Know Act (Act 159 of 1984): Propylene glycol (CAS RN 57-55-6) and Potassium hydroxide (CAS RN 1310-58-3) are listed to meet the additional requirements of the Pennsylvania State Law

Proposition 65: This product does not contain chemicals listed in the State of California as carcinogens, reproductive toxins at levels requiring a warning under this statute

15.3. **Worldwide Chemical Inventory Status** :
All the ingredients in this product are listed in USA's TCSA, and Canada's DSL inventories

SECTION 16: OTHER INFORMATION

Prepared by	Preparation date	Revision date	Revision number
Rhomar HTF LLC, dba Rhomar Water	03/08/2013	11/23/2015	2

LEGEND:

CAS : Chemical Abstracts Service
TWA : Time Weighted Average
IMDG : International Maritime Dangerous Goods
WEEL : Workplace Environmental Exposure Limit
NTP : National Toxicity Program
SARA : Superfund Amendments and Reauthorization Act
OSHA : Occupational Safety and Health Administration
IARC : International Agency for Research on Cancer
NIOSH : National Institute for Occupational Safety and Health
ACGIH : American Conference of Government Industrial Hygienists
CFR : Code of Federal Regulations
DOT : Department of Transport
IATA : International Air Transport Association
TDG : Transport of Dangerous Goods
DSL : Domestic Substances List
OHSA : Occupational Health and Safety Act
TCSA : Toxic Substances Control Act
MSHA : Mine Safety and Health Administration
ADR & RID: European Agreements Concerning International Carriage of Dangerous Goods by Rail and by Road