

SECTION1. Identification of the substance/mixture and of the company/undertaking
1.1 Product identifier

Product name:
 ECORPQUIN263, ORP Quinhydrone 263mV Solution
Product number: 01X062700

1.2 Relevant Identified uses of the substance or mixture and uses advised against
 No further relevant information available.

Application of the substance / the preparation:
 Reagent for water analysis

1.3 Details of the supplier of the safety data sheet

Company name:
 Thermo Fisher Scientific, Inc
 Blk 55, Ayer Rajah Crescent, #04-16/24, Singapore 139949,
 Website: www.eutechinst.com
 Email: eutech@thermofisher.com
Telephone number: (65) 6778 6876.
Fax number: (65) 6773 0836.

1.4 Emergency telephone number

CHEMTREC 24 HR Emergency: SINGAPORE: 800-101-2201 International: +1 703-741-5970

SECTION2. Hazards identification
2.1 Classification of the substance or mixture
GHS Classification

Skin irritation (Category 3)

2.2 Label elements
Hazard pictograms

No symbol

Signal word

Warning

Hazard statements





H316: Cause mild skin irritation.

Precautionary statement(s)

P264: Wash skin thoroughly after handling.

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

SECTION3. Composition/information on ingredients
3.1 Substances: not applicable
3.2 Mixtures

Dangerous Components:			Weight %
CAS: 106-34-3, EC-No: 203-387-6	Quinhydrone Acute toxicity, Oral(Cat:3), Skin irritation (Cat:2); Eye irritation(Cat:2) H301, H315, H319, H335		1%
CAS: 877-24-7, EC-No: 212-889-4	Potassium Hydrogen phthalate		< 1.05%
CAS: 7732-18-5, EC-No: 231-791-2	Deionized water		> 97%
CAS: 121-54-0, EC-No:204-479-9	Benzethonium Chloride, Acute toxicity, Oral(Cat:3), Skin corrosion (Cat:1) Eye damage (Cat:1); Acute aquatic toxicity (Cat:1); Chronic aquatic toxicity (Cat:1); H301;H314;H410	  	< 0.002%

SECTION4. First aid measures
4.1 Description of first aid measures
General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

After Inhalation:

Remove to fresh air. Call a physician if breathing becomes difficult.

After Skin contact:

Wash off with soap and plenty of water. Call a physician if irritation develops.

After Eye contact:

Rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.

After swallowing

Wash out mouth with plenty of water, provided person is conscious. Obtain medical attention if feeling unwell.

General Information:

Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION5. Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents: Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

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

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

Additional information

Product itself is non-combustible. Cool container with spray water from a safe distance. Contain escaping vapors with water. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations..

SECTION6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

6.3 Methods and material for containment and cleaning up:

Soak up with inert absorbent material and dispose of properly. Clean up affected area. Dispose according to local regulation.

6.4 Reference to other sections:

No dangerous materials are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION7. Handling and storage**7.1 precautions for safe handling**

Avoid contact with skin and eyes. Avoid generation of vapors/aerosols. Do not inhale substance.

Information about protection against explosions and fires:

The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities**Storage****Requirements to be met by storerooms and containers:**

Store in cool location.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Protect from heat and direct sunlight.

Store under dry conditions.

Protect from humidity and keep away from water.

Protect from the effects of light.

Recommended storage temperature:

20 °C +/- 5 °C

Storage class 12

7.3 Specific end use(s)

No further relevant information available.

SECTION8. Exposure controls/personal protection

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

8.1 Control parameters**Components with limit values that require monitoring at the workplace.**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Personal protective equipment: Safety glasses. Gloves.

**General protective and hygienic measures**

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke while working.

Breathing equipment:

Use breathing protection against effects of fumes/dust/aerosol.

Recommended filter device for short term use:

Filter P1

Protection Of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

Material Of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

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.

Value for the permeation: Level = 1 (<10 min)

Eye protection:

Safety glasses

use against the effects of fumes / dust

Body protection:

Protective work clothing.

SECTION9. Physical and chemical properties

9.1 Information on basic physical and chemical properties	
Appearance:	
Form:	Liquid
colour:	Dark green or black
Odour:	Odourless
Odour threshold:	Not determined.
pH-value	Approximately 4
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Approximately 100 °C
Flash point:	Not determined
Inflammability (solid, gaseous)	Not determined
Danger Of explosion:	Product is not explosive.
Critical values for explosion	
Lower:	Not determined
Upper:	Not determined
Density:	1.0 g/cm³ at 25°C
Relative density	Not determined
Vapour density	Not applicable
Evaporation rate	Not applicable
Solubility in / Miscibility with	
Water:	Soluble
Segregation coefficient (n-octanol/water):	Not determined
Viscosity:	
Dynamic:	Not applicable
kinematic	Not applicable
Solvent content:	
Organic solvents:	Not applicable
Solids content:	Not applicable

9.2 Other information

No further relevant information available

SECTION10. Stability and reactivity**Reactivity**

No further relevant information available.

Chemical Stability

Stable under standard ambient conditions.

Possibility Of Hazardous Reactions:

Highly reactive with combustible materials, alkalis.

Conditions to avoid:

Heating

Incompatible materials:

Strong Oxidizing agents

Hazardous decomposition products:

No further relevant information available.

SECTION11. Toxicological information**11.1 Information on toxicological effects****Acute toxicity:**

LD 50 (oral, rat): 225 mg/kg.

Primary irritant effect:**on the skin:**

May cause skin irritations.

on the eye:

May cause eye irritations.

Ingestion:

Harmful if swallowed.

Additional toxicological information:

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No data available

SECTION12. Ecological information**12.1 Toxicity****Aquatic toxicity:**

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

Other information:

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:**General notes:**

No ecological problems are to be expected when the product is handled and used with due care and attention.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No further relevant information available.

SECTION13. Disposal considerations**13.1 Waste treatment methods**

Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

Uncleanedpackagings:**Recommendation:**

Disposal must be made according to official regulations.

Recommended cleaning agent:

Water, if necessary with cleaning agent.

SECTION14. Transport information

14.1 UN-Number ADR, ADN, IMDG, IATA	Not applicable.
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Not applicable.
14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class	Not applicable.
14.4 Packing group ADR, IMDG, IATA	Not applicable.
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.

SECTION15. Regulatory information**15.4 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

This safety datasheet complies with the requirements of Regulation According to Regulation (EC) No. 1272/2008 and GHS system.

Information about limitation of use: Not required.

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

SECTION 16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ATE - Acute Toxicity Estimate CAS - Chemical Abstracts Service TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDL - Canadian Domestic Substances List/Non-DomesticSubstances List EINECS/ELINCS - European Inventory of Existing Commercial ChemicalSubstances/EU List of Notified Chemical Substances NLP - EU No Longer Polymers IECSC - Chinese Inventory of Existing Chemical Substances ENCS - Japanese Existing and New Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances AICS - Australian Inventory of Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances WEL - Workplace Exposure Limit TWA - Time Weighted Average DNEL - Derived No Effect Level PNEC - Predicted No Effect Concentration NOEC - No Observed Effect Concentration RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50% LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50%	POW - Partition coefficient Octanol:Water PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative BCF - Bioconcentration factor IARC - International Agency for Research on Cancer NTP - National Toxicity Program OSHA - United States Occupational Safety and Health Administration ACGIH - American Conference of Governmental Industrial Hygienists NIOSH IDLH - The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health NFPA - United States National Fire Protection Association ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships DOT - United States Department of Transportation GHS - Globally Harmonized System of Classification and Labelling of Chemicals
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Disclaimer

The information provided on this 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.