

SAFETY DATA SHEET

According to JIS Z 7253:2019
Issue Date 06-Aug-2026
 Revision Number 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	QCdetect™ dsRNA ELISA Kit
Product Code	291-99001

Supplier FUJIFILM Wako Pure Chemical Corporation
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Recommended uses For research use only

Restrictions on use Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Corrosive to metals

Category 1

Acute toxicity - Inhalation (Dusts/Mists)

Category 3

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

Category 1

Skin sensitization

Category 1

Specific target organ toxicity (single exposure)

Category 1

Category 1 respiratory system, central nervous system, blood system, kidneys

Specific target organ toxicity (repeated exposure)

Category 1

Category 1 respiratory system

Chronic aquatic toxicity

Category 2

Pictograms



Signal word

Danger

Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H331 - Toxic if inhaled

H317 - May cause an allergic skin reaction

H411 - Toxic to aquatic life with long lasting effects

H370 - Causes damage to the following organs: respiratory system, central nervous system, blood system, kidneys

H372 - Causes damage to the following organs through prolonged or repeated exposure: respiratory system

Precautionary statements-(Prevention)

- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling

- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- Keep only in original container

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- Collect spillage
- Absorb spillage to prevent material damage

Precautionary statements-(Storage)

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up
- Store in corrosive resistant/ container with a resistant inner liner

Precautionary statements-(Disposal)

- Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Kit (Set of mixtures)

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Antibody-coated Plate	-	N/A	N/A	N/A	N/A-29-9901
UTP dsRNA Standard	-	N/A	N/A	N/A	N/A-29-9902
m1ψdsRNA Standard	-	N/A	N/A	N/A	N/A-29-9903
Sample Reaction Buffer	-	N/A	N/A	N/A	N/A-29-9904
Antibody Reaction Buffer	-	N/A	N/A	N/A	N/A-29-9905
Biotin-conjugated Antibody	-	N/A	N/A	N/A	N/A-29-9906
Peroxidase-conjugated Streptavidin Solution	-	N/A	N/A	N/A	N/A-29-9907
TMB Solution	-	N/A	N/A	N/A	N/A-29-9908
Stop Solution	-	N/A	N/A	N/A	N/A-29-9909
Wash Solution(10×)	-	N/A	N/A	N/A	N/A-29-9911
Plate Seal	-	N/A	N/A	N/A	N/A-29-9912

Note on ISHL No.: * in the table means announced chemical substances.

Substances Remarks:

This Product includes the following componets. Disodium Hydrogen Phosphate 5.0 - 15 %, 2-Methyl-2H-isothiazol-3-one <0.50 %, Ethylene Glycol <5.0 %, 1,2-Propanediol <10 %, Sulfuric acid 6.9 %

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

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

rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO₂), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recovery, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling**Technical measures**

Avoid contact with alkaline substances. Avoid contact with metal. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage**Safe storage conditions****Storage conditions**

Store away from sunlight in a cool (2-10 °C) well-ventilated dry place.

Safe packaging material

No information available

Incompatible substances

alkaline substances, Metals

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Sulfuric Acid 7664-93-9	Ceiling: 1 mg/m ³	N/A	TWA 0.2mg/m ³
Ethylene Glycol 107-21-1	N/A	N/A	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction

Chemical Name	Concentration standard value set by the Minister of Health, Labor and Welfare (8hr)	Concentration standard value set by the Minister of Health, Labor and Welfare (Short-Term)
Ethylene Glycol 107-21-1	10 ppm	50 ppm

Personal protective equipment

Respiratory protection Gas mask for acidic gas (JIS T 8152)
Hand protection chemical protective gloves (JIS T 8116)
Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)
Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Appearance	Kit (Set of mixtures)
Odor	no data available
Melting point/freezing point	no data available
Boiling point, initial boiling point and boiling range	no data available
Flammability	no data available
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or explosive limits	
Upper:	no data available
Lower:	no data available
Flash point	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Solubilities	no data available
n-Octanol/water partition coefficient:(log Pow)	no data available
Vapour pressure	no data available
Specific Gravity / Relative density	no data available
Vapour density	no data available
Particle characteristics	no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Hazardous reactions

Corrodes metals to generate hydrogen gas.

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

alkaline substances, Metals

Hazardous decomposition products
Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulfur oxides (SO_x), Phosphorus oxide

Section 11: TOXICOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN)

https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput
Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1,2-Propanediol	22000 mg/kg (Rat)	20800 mg/kg (Rabbit)	N/A
Sulfuric Acid	2140 mg/kg (Rat)	N/A	0.375 mg/L (Rat) 4 h
Ethylene Glycol	5890 - 13400 mg/kg (Rat)	9530 mg/kg (Rabbit)	2.7 mg/L (Rat) 4 h
2-Methyl-2H-isothiazol-3-one	232 - 249 mg/kg (Rat) 120 mg/kg (Rat)	242 mg/kg (Rat)	0.11 mg/L (Rat) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
1,2-Propanediol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
1,2-Propanediol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.

2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.
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Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH
Sulfuric Acid 7664-93-9	-	Group 1	A2	-

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
1,2-Propanediol	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
Ethylene Glycol	Based on the NITE GHS classification results.
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN)
https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
1,2-Propanediol	EC50 : <i>Pseudokirchneriella subcapitata</i>	LC50 : <i>Oryzias latipes</i> > 100 mg/L 96 h	EC50 : <i>Daphnia magna</i> > 1000 mg/L 48 h

	> 1000 mg/L 72 h		
Sulfuric Acid	N/A	LC50 : <i>Lepomis macrochirus</i> 16 - 28 mg/L 96 h	LC50 : <i>Daphnia magna</i> 29 mg/L 24 h
Ethylene Glycol	ErC50 : <i>Pseudokirchneriella subcapitata</i> > 1000 mg/L 72 h	LC50 : <i>Oryzias latipes</i> > 100 mg/L 96 h	EC50 : <i>Daphnia magna</i> > 1120 mg/L 48 h
2-Methyl-2H-isothiazol-3-one	ErC50 : <i>Raphidocelis</i> 0.157 mg/L 72 h	LC50 : <i>Oncorhynchus mykiss</i> 4.77 mg/L 96 h	EC50 : <i>Daphnia magna</i> 0.998 mg/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the aquatic environment source information	Long-term (chronic) hazardous to the aquatic environment source information
1,2-Propanediol	Based on the NITE GHS classification results	Based on the NITE GHS classification results
Sulfuric Acid	Based on the NITE GHS classification results	Based on the NITE GHS classification results
Ethylene Glycol	Based on the NITE GHS classification results	Based on the NITE GHS classification results
2-Methyl-2H-isothiazol-3-one	Based on the NITE GHS classification results	Based on the NITE GHS classification results

Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Hazard to the ozone layer	No information available

Section 13: DISPOSAL CONSIDERATIONS**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION**ADR/RID**

UN number	UN2796
Proper shipping name:	Sulphuric acid
UN classification	8
Subsidiary hazard class	
Packing group	II
Marine pollutant	Yes

IMDG

UN number	UN2796
Proper shipping name:	Sulphuric acid
UN classification	8
Subsidiary hazard class	
Packing group	II
Marine pollutant (Sea)	Yes
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

IATA

UN number	UN2796
Proper shipping name:	Sulphuric acid
UN classification	8
Subsidiary hazard class	
Packing group	II

Environmentally Hazardous Substance Yes

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act	Not applicable
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57) Notifiable Substances (Law Art.57-2) Group 3 Specified Chemical Substance, (Ordinance on Prevention of Hazards Due to Specified Chemical Substances Art.2 Para.1, Item 6) Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Regulations for the carriage and storage of dangerous goods in ship	Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	Corrosive Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
Pollutant Release and Transfer Register Law (2023.4.1-)	Not applicable
Water Pollution Control Act	Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)
Air Pollution Control Law	Specified Substances

Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Weight %	Scheduled enforcement date
Notifiable Substances (Law Art.57-2)	Ethylene glycol	<5.0	Existing Law
Notifiable Substances (Law Art.57-2)	(±)-Propylene glycol	<10	Existing Law
Notifiable Substances (Law Art.57-2)	Sulfuric acid	6.9	Existing Law

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)
https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput
 IATA dangerous Goods Regulations
 RTECS:Registry of Toxic Effects of Chemical Substances
 Japan Industrial Safety and Health Association GHS Model SDS
 Dictionary of Synthetic Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.
 Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
 etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in 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 guidance for safe handling, and is not to be considered 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 materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet