



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 26-Mar-2024 Revision Number 2.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	10% Tetrapropylammonium Hydroxide Solution
Product Code	205-04593,201-04595

Supplier FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan

Phone: +81-6-6203-3741 Fax: +81-6-6203-2029

Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

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

Skin corrosion/irritation Serious eye damage/eye irritation Category 1

Category 1

Pictograms



Signal word

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary statements-(Prevention)

- 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

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
- 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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary statements-(Storage)

Store locked up

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 Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Water	=<90	18.02	-	-	7732-18-5
Tetrapropylammonium hvdroxide	10.0-11.0	203.36	(2)-186	公表	4499-86-9

Note on ISHL No.:

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

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 contaminent and methods and materials for cleaning up

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

Recoverly, neutralization

No information available

Secondary disaster prevention measures

^{*} in the table means announced chemical substances.

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with acidic substances 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 well-ventilated place at room temperature (preferably cool).

Keep container tightly closed.

Safe packaging material Polyethylene Incompatible substances Acidic substances

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 handand eye-wash facility. And display their position clearly.

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Protective mask

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

ColorcolorlessTurbidityclearAppearanceliquid

Odor characteristic odor
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 availableLower:no data available

Flash point no data available
Auto-ignition temperature: no data available
Decomposition temperature: no data available
pH Strongly basic
Viscosity (coefficient of viscosity) no data available
Dynamic viscosity no data available

Solubilities water, Ethanol, acetone: free soluble.

n-Octanol/water partition coefficient:(log Pow)
Napour pressure
Specific Gravity / Relative density
Napour density
no data available
1.01g/mL
no data available

Vapour densityno data availableParticle characteristicsno data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available

Chemical stability Stable under recommended storage conditions.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Acidic substances

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity no data available

Skin irritation/corrosionno data availableSerious eye damage/ irritationno data availableRespiratory or skin sensitizationno data availableReproductive cell mutagenicityno data availableCarcinogenicityno data available

Reproductive toxicityno data availableSTOT-single exposureno data availableSTOT-repeated exposureno data availableAspiration hazardno data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity no data available

Other data no data available

Persistence and degradability Bioaccumulative potential

Mobility in soil Hazard to the ozone layer No information available No information available No information available 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 UN3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Tetrapropylammonium hydroxide solution)

UN classfication 8

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG

UN number UN3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Tetrapropylammonium hydroxide solution)

UN classfication 8

Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA

UN number UN3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Tetrapropylammonium hydroxide solution)

UN classfication

Subsidiary hazard class

Packing group III

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Substances Control Law
Not applicable
Not applicable

Industrial Safety and Health Act Not applicable

Industrial Safety and Health Act (

【2024.4.1~】Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)

<u>2024~)</u>

Regulations for the carriage and storage of dangerous

Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding

Transport by Ship and Storage, Attached Table 1)

goods in ship Civil Aeronautics Law

Corrosive Substances (Ordinance Art.194, MITL Nortification for Air Transportation of

Explosives etc., Attached Table 1)

Pollutant Release and Transfer Not applicable

Register Law

(2023.4.1-)

Export Trade Control Order Not applicable

Section 16: OTHER INFORMATION

Key literature references and NITE: National Institute of Technology and Evaluation (JAPAN)

sources for data etc. http://www.safe.nite.go.jp/japan/db.html

IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances
Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

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