



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 04-Feb-2023 Revision Number 2.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	(+/-)-3-Heptanol
Product Code	081-03992

Manufacturer FUJIFILM Wako Pure Chemical Corporation

> 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741

Fax: +81-6-6203-5964 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 For research use only

Recommended uses and restrictions on use

Section 2: HAZARDS IDENTIFICATION

GHS classification Classification of the substance or mixture Flammable liquids Acute toxicity - Oral

Category 3 Category 4







Signal word

Warning

Hazard statements

May cause respiratory irritation H302 - Harmful if swallowed

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- · Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- · Keep container tightly closed
- · Ground/bond container and receiving equipment
- Use explosion-proof electrical/ ventilating / lighting / equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements-(Response)

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- · Rinse mouth

• In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary statements-(Storage)

Store in a well-ventilated place. Keep cool

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 Substance

Formula CH3(CH2)3CH(OH)CH2CH3

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
3-Heptanol	95.0	116.20	(2)-217	公表	589-82-2

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

Impurities and/or Additives: Not applicable

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. Vapors may form explosive mixtures with air

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

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. 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

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

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 Glass

Incompatible substances Strong oxidizing agents

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 gas mask for organic gas
Hand protection Impermeable protective gloves

Eye protection protective eyeglasses or chemical safety goggles

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color Colorless - slightly yellow

Turbidity clear Appearance liquid

Odor characteristic odor
Melting point/freezing point -70 °C

Melting point/freezing point -70 °C Boiling point, initial boiling point and boiling range 156 °C

Flammability Flammable liquid and vapor

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 54 °C

Auto-ignition temperature:no data availableDecomposition temperature:no data availablepHno data availableViscosity (coefficient of viscosity)no data availableDynamic viscosityno data available

Solubilities Ethanol: Very soluble, water: practically insoluble, or insoluble

n-Octanol/water partition coefficient:(log Pow)
Napour pressure
Specific Gravity / Relative density
Napour density
Napour density
no data available
no data available
0.815 - 0.825 g/mL
4.0(Air=1)

Particle characteristics 4.0(All=1)

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, Heat, flames and sparks, static electricity, spark

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	
3-Heptanol	1870 mg/kg (Rat)	4400 mg/kg (Rabbit)	N/A	
		4360 µL/kg (Rabbit)		

Skin irritation/corrosion no data available Serious eye damage/ irritation no data available no data available Respiratory or skin sensitization Reproductive cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available no data available **Aspiration hazard**

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No information 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

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 UN1986

Proper shipping name: Alcohols, flammable, toxic, n.o.s. (3-Heptanol)

UN classfication 3
Subsidiary hazard class 6.1
Packing group III

Marine pollutant Not applicable

IMDG

UN number UN1986

Proper shipping name: Alcohols, flammable, toxic, n.o.s. (3-Heptanol)

UN classfication 3
Subsidiary hazard class 6.1
Packing group III

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 UN1986

Proper shipping name: Alcohols, flammable, toxic, n.o.s. (3-Heptanol)

UN classfication 3
Subsidiary hazard class 6.1
Packing group III

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

International Inventories

TSCA Listed

Japanese regulations

Fire Service Act Category IV, Class II petroleums, dangerous grade 3

Poisonous and Deleterious Not applicable

Substances Control Law

Industrial Safety and Health Act Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1

Item 4

Regulations for the carriage

and storage of dangerous

Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding

Transport by Ship and Storage, Attached Table 1)

goods in ship

Civil Aeronautics Law Flammable Liquids (Ordinance Art.194, MITL Nortification for Air Transportation of

Explosives etc., Attached Table 1)

Pollutant Release and Transfer Not applicable

Register Law (~2023.3.31)

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 sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)

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

 $\label{lem:condition} \mbox{Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.}$

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 Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet