# SAFETY DATA SHEET

According to JIS Z 7253:2012

**Revision Date** 14-May-2019

**Version** 2.01

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>3-Heptyne</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product code</strong></td>
<td>321-59051,329-59052</td>
</tr>
<tr>
<td><strong>CAS RN</strong></td>
<td>2586-89-2</td>
</tr>
<tr>
<td><strong>Formula</strong></td>
<td>C7H12</td>
</tr>
</tbody>
</table>

**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

**Recommended uses and restrictions on use**

For research purposes

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## Section 2: HAZARDS IDENTIFICATION

**GHS classification**

**Classification of the substance or mixture**

- **Flammable liquids** Category 2  
- **Skin corrosion/irritation** Category 2  
- **Serious eye damage/eye irritation** Category 2A  
- **Specific target organ toxicity (single exposure)** Category 3

**Pictograms**

- Flammable liquid
- Eye irritant

**Signal word**

Danger

**Hazard statements**

- H225 - Highly flammable liquid and vapor  
- H315 - Causes skin irritation  
- H319 - Causes serious eye irritation  
- H335 - May cause respiratory irritation

**Precautionary statements-(Prevention)**

- Wash face, hands and any exposed skin thoroughly after handling  
- Wear protective gloves/protective clothing/eye protection/face protection  
- Avoid breathing dust/fume/gas/mist/vapors/spray  
- Use only outdoors or in a well-ventilated area  
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
- Keep container tightly closed

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• Ground/bond container and receiving equipment
• Use explosion-proof electrical/ventilating/lighting/equipment
• Use only non-sparking tools
• Take precautionary measures against static discharge
• Keep cool

Precautionary statements-(Response)
• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
• If eye irritation persists: Get medical advice/attention.
• If skin irritation occurs: Get medical advice/attention
• 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.
• Call a POISON CENTER or doctor/physician if you feel unwell.
• In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary statements-(Storage)
• Store in a well-ventilated place. Keep container tightly closed
• 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
Substance

Formula
C7H12

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>Molecular weight</th>
<th>ENCS</th>
<th>ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Heptyne</td>
<td>97.0</td>
<td>96.17</td>
<td>N/A</td>
<td>N/A</td>
<td>2586-89-2</td>
</tr>
</tbody>
</table>

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

Special extinguishing method
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.

**Protection of 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**
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). Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Storage**

**Safe storage conditions**
Keep container protect from light, store 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 hand- and 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**
Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless - pale yellow</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point, initial boiling point and boiling range</td>
<td>105 - 106 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>2 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity / Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Ethanol, acetone: miscible. water: practically insoluble, or insoluble.</td>
</tr>
<tr>
<td>n-Octanol/water partition coefficient:(log Pow)</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity (coefficient of viscosity)</td>
<td>No data available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>May be altered by light.</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No data available</td>
</tr>
<tr>
<td>Hazardous reactions</td>
<td>None under normal processing</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Carbon monoxide (CO), Carbon dioxide (CO2)</td>
</tr>
</tbody>
</table>

Section 11: TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Skin irritation/corrosion</td>
<td>No data available</td>
</tr>
<tr>
<td>Serious eye damage/ irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Reproductive cell mutagenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No data available</td>
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<tr>
<td>STOT-repeated exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Handle in accordance with good industrial hygiene and safety practice.
Section 12: ECOLOGICAL INFORMATION

Ecotoxicity
No information available

Other data
No data available

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
UN3295
Proper shipping name: Hydrocarbons, liquid, n.o.s. (3-Heptyne)
UN classification
3
Subsidiary hazard class

Packing group
II
Marine pollutant
Not applicable

IMDG
UN number
UN3295
Proper shipping name: Hydrocarbons, liquid, n.o.s. (3-Heptyne)
UN classification
3
Subsidiary hazard class

Packing group
II
Marine pollutant (Sea)
Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

IATA
UN number
UN3295
Proper shipping name: Hydrocarbons, liquid, n.o.s. (3-Heptyne)
UN classification
3
Subsidiary hazard class

Packing group
II
Environmentally Hazardous Substance
Not applicable

Section 15: REGULATORY INFORMATION

International Inventories
EINECS/ELINCS
Listed
TSCA
-

Japanese regulations
Fire Service Act
Category IV, Class I petroleums, dangerous grade 2
Poisonous and Deleterious Substances Control Law Not applicable
Industrial Safety and Health Act Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1
Item 4) Regulations for the carriage and storage of dangerous goods in ship

Civil Aeronautics Law

Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)

Pollutant Release and Transfer Register Law

Civil Aeronautics Law

Flammable Liquids (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 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
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
etc

Disclaimer

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GHS Classification is according to JIS Z7252(2014). *JIS: Japanese Industrial Standards

End of Safety Data Sheet