



# SAFETY DATA SHEET

According to JIS Z 7253:2019 Issue Date 16-Jul-2025 Revision Number 2.06

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Nonanoic Acid                           |
|--------------|---|
| Product Code | 142-02692                               |
| 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/irritationCategory 2Serious eye damage/eye irritationCategory 2ASpecific target organ toxicity (single exposure)Category 3

Category 3 Narcotic effects

Acute aquatic toxicity
Chronic aquatic toxicity
Category 2
Category 2

**Pictograms** 





Signal word

Warning

### **Hazard statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H402 - Harmful to aquatic life

H411 - Toxic to aquatic life with long lasting effects

## **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
- · Avoid release to the environment

#### 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 ON SKIN: Wash with plenty of soap and water

- If skin irritation occurs: Get medical advice/attention
- · Take off contaminated clothing and wash 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
- Collect spillage

## 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 CH3(CH2)7COOH

| Chemical Name | Weight-% | Molecular weight | ENCS    | ISHL No. | CAS RN   |
|---------------|----------|------------------|---------|----------|----------|
| Nonanoic Acid | 90.0     | 158.24           | (2)-608 | *        | 112-05-0 |

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

## **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

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 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**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.Use with local exhaust ventilation. 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 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** 

Color Colorless - pale yellow

Turbidity clear Appearance liquid

**Odor** characteristic odor

Melting point/freezing point 10 °C Boiling point, initial boiling point and boiling range 254 °C

Flammability no data available
Evaporation rate: no data available
Flammability (solid, gas): no data available

Upper/lower flammability or explosive limits

Upper:
Lower:
no data available
pH
no data available

Dynamic viscosity no data available no data available

**Solubilities** Ethanol , acetone : Very soluble. water : practically insoluble,or

insoluble . 3.42

n-Octanol/water partition coefficient:(log Pow)

Vapour pressure no data available

Specific Gravity / Relative density 0.904 -0.909 g/m L (20°C)

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, 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**

\*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        |
|---------------|----------------------|----------------------|------------------------|
| Nonanoic Acid | > 2000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | > 5.3 mg/L ( Rat ) 4 h |

| Chemical Name | Acute toxicity -oral- source information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas-<br>source information |
|---------------|--|--|---|
|               |  |  | Based on the NITE GHS                                 |
|               | classification results.                  | classification results.                    | classification results.                               |

| Chemical Name | Acute toxicity -inhalation |                         | Acute toxicity -inhalation mist- |
|---------------|----------------------------|-------------------------|----------------------------------|
|               | vapor- source information  | source information      | source information               |
| Nonanoic Acid | Based on the NITE GHS      | Based on the NITE GHS   | Based on the NITE GHS            |
|               | classification results.    | classification results. | classification results.          |

## Skin irritation/corrosion

| Chemical Name                     | Skin corrosion/irritation source information         |
|-----------------------------------|--|
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| Serious eye damage/ irritation    | <u> </u>   |
| Chemical Name                     | Serious eye damage/irritation source information     |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| Respiratory or skin sensitization | <u> </u>   |
| Chemical Name                     | Respiratory or Skin sensitization source information |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| Reproductive cell mutagenicity    | ·  |
| Chemical Name                     | germ cell mutagencity source information             |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| Carcinogenicity                   | <u> </u>   |
| Chemical Name                     | Carcinogenicity source information                   |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
|                                   | <u>.</u>   |
| Reproductive toxicity             |  |
| Chemical Name                     | Reproductive toxicity source information             |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| STOT-single exposure              |  |
| Chemical Name                     | STOT -single exposure- source information            |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| STOT-repeated exposure            |  |
| Chemical Name                     | STOT -repeated exposure- source information          |
| Nonanoic Acid                     | Based on the NITE GHS classification results.        |
| Aspiration hazard                 |  |
| Chemical Name                     | Aspiration Hazard source information                 |
|                                   |  |

## **Section 12: ECOLOGICAL INFORMATION**

Based on the NITE GHS classification results.

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

Nonanoic Acid

## **Ecotoxicity**

| Chemical Name | Algae/aquatic plants | Fish                       | Crustacea            |
|---------------|----------------------|----------------------------|----------------------|
| Nonanoic Acid | N/A                  | LC50 : Pimephales promelas | EC50 : Daphnia magna |
|               |                      | 93.4 - 115 mg/L 96 h       | 23.63 mg/L 48 h      |
|               |                      | LC50 : Oncorhynchus mykiss | _                    |
|               |                      | 68 - 121 mg/L 96 h         |                      |
|               |                      | LC50 : Lepomis macrochirus |                      |
|               |                      | = 105  mg/L  96  h         |                      |

## Other data

| Chemical Name | Short-term (acute) hazardous to the    | Long-term (chronic) hazardous to the   |
|---------------|--|--|
|               | aquatic environment source information | aquatic environment source information |
| Nonanoic Acid | Based on the NITE GHS classification   | Based on the NITE GHS classification   |
|               | results.                               | results.                               |

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

UN3082 **UN** number

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Nonanoic Acid)

**UN classfication** 

Subsidiary hazard class

Ш Packing group Marine pollutant Yes

**IMDG** 

**UN** number UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Nonanoic Acid)

**UN classfication** 

Subsidiary hazard class

Packing group Ш Marine pollutant (Sea) Yes

No information available Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

**IATA** 

**UN** number UN3082

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Nonanoic Acid)

**UN** classfication

Subsidiary hazard class

Packing group Ш **Environmentally Hazardous** Yes

Substance

## Section 15: REGULATORY INFORMATION

Japanese regulations

**Fire Service Act** Category IV, Class III petroleums, dangerous grade 3

**Poisonous and Deleterious** Not applicable

**Substances Control Law** 

Industrial Safety and Health Act Not applicable

Industrial Safety and Health Act ( 【2026.4.1~】 Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57) 【2026.4.1~】Notifiable Substances (Law Art.57-2)

2026~)

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

Regulations for the carriage and storage of dangerous

goods in ship

Transport by Ship and Storage, Attached Table 1)

**Civil Aeronautics Law** Misellaneous Dangerous Substances and Articles (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-)

Industrial Safety and Health Law

| Law Name                             | Chemical Name in Regulation | Weight % | Scheduled enforcement date |
|--------------------------------------|-----------------------------|----------|----------------------------|
| Notifiable Substances (Law Art.57-2) | Nonanoic acid               | 90.0     | 2026/4/1                   |

## **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 Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

#### Record of SDS revisions

The following contents were revised. Handling and storage. Exposure controls/personal protection. Ecological information. Regulatory information.

#### **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**