

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision date** 23-May-2023  
 Revision Number 4.05

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	Wetting Tension Test Mixture No.58.0
<b>Product Code</b>	232-02041

<b>Manufacturer</b>	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
<b>Supplier</b>	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
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses</b>	For research use only
<b>Restrictions on use</b>	Seek expert judgment when using for purposes other than those recommended.

## Section 2: HAZARDS IDENTIFICATION

**GHS classification****Classification of the substance or mixture**

Serious eye damage/eye irritation  
 Reproductive Toxicity

Category 2B  
 Category 1B

**Pictograms****Signal word**

Danger

**Hazard statements**

- H320 - Causes eye irritation
- H360 - May damage fertility or the unborn child

**Precautionary statements-(Prevention)**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling

**Precautionary statements-(Response)**

- IF exposed or concerned: Get medical advice/attention
- 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

**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
Formamide	=<100	45.04	(2)-681	*	75-12-7

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

Impurities and/or Additives: Not applicable

Substances Remarks: This Product includes the following componets. COLORANT;&lt;0.1%

**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 (CO<sub>2</sub>), 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**

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****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**

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Formamide 75-12-7	N/A	N/A	TWA: 10 ppm Skin

**Personal protective equipment****Respiratory protection**

Protective mask

**Hand protection**

chemical protective gloves ( JIS T 8116 )

**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**

blue

**Appearance**

liquid

**Odor**

light, amine odor

**Melting point/freezing point**

2.5 °C

**Boiling point, initial boiling point and boiling range**

210 °C (dec.)

**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	154 °C / 309 °F (COC)
Auto-ignition temperature:	500 °C
Decomposition temperature:	no data available
pH	mild basic (aq.)
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Solubilities	water : Very soluble .
n-Octanol/water partition coefficient:(log Pow)	no data available
Vapour pressure	2 Pa
Specific Gravity / Relative density	1.138
Vapour density	1.56 (air = 1)
Particle characteristics	no data available

## Section 10: STABILITY AND REACTIVITY

### Stability

Reactivity	no data available
Chemical stability	May be altered by light.
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 monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> )

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Formamide	3200 mg/kg ( Rat )	> 13500 mg/kg ( Rat )	> 21 mg/L ( Rat ) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
Formamide	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
Formamide	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
Formamide	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Formamide	Based on the NITE GHS classification results.

### Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Formamide	Based on the NITE GHS classification results.

### Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
Formamide	Based on the NITE GHS classification results.

### Carcinogenicity

Chemical Name	Carcinogenicity source information
Formamide	Based on the NITE GHS classification results.

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Formamide	Based on the NITE GHS classification results.

**STOT-single exposure**

Chemical Name	STOT -single exposure- source information
Formamide	Based on the NITE GHS classification results.

**STOT-repeated exposure**

Chemical Name	STOT -repeated exposure- source information
Formamide	Based on the NITE GHS classification results.

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
Formamide	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Formamide	<i>ErC50 : Pseudokirchneriella subcapitata</i> > 1000 mg/L 72 h	<i>LC50 : Oryzias latipes</i> > 100 mg/L 96 h	<i>EC50 : Daphnia magna</i> > 500 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
Formamide	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** Not regulated  
**UN number** -  
**Proper shipping name:**  
**UN classification**  
**Subsidiary hazard class**  
**Packing group**  
**Marine pollutant** Not applicable

**IMDG** Not regulated  
**UN number** -  
**Proper shipping name:**  
**UN classification**  
**Subsidiary hazard class**  
**Packing group**  
**Marine pollutant (Sea)** Not applicable

<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available
<b>IATA</b>	Not regulated
<b>UN number</b>	-
<b>Proper shipping name:</b>	
<b>UN classification</b>	
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	
<b>Environmentally Hazardous Substance</b>	Not applicable

## Section 15: REGULATORY INFORMATION

### International Inventories

<b>EINECS/ELINCS</b>	-
<b>TSCA</b>	-

### Japanese regulations

<b>Fire Service Act</b>	Category IV, Class III petroleum, dangerous grade 3 water-soluble
<b>Poisonous and Deleterious Substances Control Law</b>	Not applicable
<b>Industrial Safety and Health Act</b>	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)No.547
<b>Regulations for the carriage and storage of dangerous goods in ship</b>	Not applicable
<b>Civil Aeronautics Law</b>	Not applicable
<b>Marine Pollution Prevention Law</b>	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
<b>Pollutant Release and Transfer Register Law (2023.4.1-)</b>	Class 2
<b>Class 2 - No.</b>	815
<b>Export Trade Control Order</b>	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2) (~2024.3.31)	Pollutant Release and Transfer Register Law (2023.4.1-)
Formamide 75-12-7 (= < 100)	-	Applicable	Applicable

## Section 16: OTHER INFORMATION

<b>Key literature references and sources for data etc.</b>	NITE: National Institute of Technology and Evaluation (JAPAN) <a href="http://www.safe.nite.go.jp/japan/db.html">http://www.safe.nite.go.jp/japan/db.html</a> 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
<b>Record of SDS revisions</b>	The following contents were revised. Product and company identification. Fire fighting measures. Exposure controls/personal protection. Toxicological information. Ecological information. Regulatory information.
<b>Disclaimer</b>	

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**