

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision date** 29-Feb-2024  
 Revision Number 1.03

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	SCALEVIEW-S4
<b>Product Code</b>	194-18561

<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

Category 2B

Specific target organ toxicity (single exposure)

Category 2

Category 2 respiratory system

## Pictograms



Signal word

Warning

## Hazard statements

H320 - Causes eye irritation

H371 - May cause damage to the following organs: respiratory system

## Precautionary statements-(Prevention)

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product

## Precautionary statements-(Response)

- IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
- 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
D(-)-Sorbitol	<50	182.17	(8)-50	*	50-70-4
Dimethyl Sulfoxide	<30	78.13	(2)-1553	*	67-68-5
Urea	<30	60.06	(2)-1732	*	57-13-6
Glycerol	<15	92.09	(2)-242	*	56-81-5
Polyethylene glycol p-octylphenyl ether	<1	N/A	(7)-172	N/A	9002-93-1

**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 (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**

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**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity)

**Storage****Safe storage conditions**

**Storage conditions** Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.

**Safe packaging material** Polyethylene

**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
Glycerol 56-81-5	N/A	N/A	TWA 10mg/m <sup>3</sup> (vapor)

**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 - nearly colorless

**Turbidity**

clear ~ nearly clear

**Appearance**

liquid

**Odor**

no data available

**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

<b>Flammability (solid, gas):</b>	no data available
<b>Upper/lower flammability or explosive limits</b>	
<b>Upper:</b>	no data available
<b>Lower:</b>	no data available
<b>Flash point</b>	no data available
<b>Auto-ignition temperature:</b>	no data available
<b>Decomposition temperature:</b>	no data available
<b>pH</b>	7.7 - 8.9
<b>Viscosity (coefficient of viscosity)</b>	no data available
<b>Dynamic viscosity</b>	no data available
<b>Solubilities</b>	No data available
<b>n-Octanol/water partition coefficient:(log Pow)</b>	no data available
<b>Vapour pressure</b>	no data available
<b>Specific Gravity / Relative density</b>	1.205 - 1.281
<b>Vapour density</b>	no data available
<b>Particle characteristics</b>	no data available

## Section 10: STABILITY AND REACTIVITY

### Stability

<b>Reactivity</b>	no data available
<b>Chemical stability</b>	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>), Sulfur oxides (SO<sub>x</sub>)

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
D(-)-Sorbitol	15900 mg/kg ( Rat )	N/A	N/A
Dimethyl Sulfoxide	14,500 mg/kg ( Rat )	40,000 mg/kg ( Rat )	>5,330 mg/m <sup>3</sup> ( Rat ) 4 h
Glycerol	12600 mg/kg ( Rat )	> 10 g/kg ( Rabbit )	> 570 mg/m <sup>3</sup> ( Rat ) 1 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	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
Dimethyl Sulfoxide	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	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
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**Respiratory or skin sensitization**

Chemical Name	Respiratory or Skin sensitization source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**Reproductive cell mutagenicity**

Chemical Name	germ cell mutagenicity source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**Carcinogenicity**

Chemical Name	Carcinogenicity source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**STOT-single exposure**

Chemical Name	STOT -single exposure- source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**STOT-repeated exposure**

Chemical Name	STOT -repeated exposure- source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Dimethyl Sulfoxide	N/A	N/A	EC50 : <i>Artemia</i> 6830 mg/L 24 h
Glycerol	N/A	LC50: <i>Oncorhynchus mykiss</i> 51 - 57 mL/L 96 h	EC50: <i>Daphnia magna</i> 500 mg/L 24 h
Polyethylene glycol p-octylphenyl ether	N/A	LC50 : <i>Lepomis macrochirus</i> 3 mg/L 96 h	N/A

**Other data**

Chemical Name	Short-term (acute) hazardous to the aquatic environment source information	Long-term (chronic) hazardous to the aquatic environment source information
Dimethyl Sulfoxide	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Polyethylene glycol p-octylphenyl ether	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

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

### Section 15: REGULATORY INFORMATION

#### Japanese regulations

Fire Service Act	Not applicable
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Not applicable
Industrial Safety and Health Act (2024-)	【2024.4.1~】 Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Regulations for the carriage and storage of dangerous goods in ship	Not applicable
Civil Aeronautics Law	Not applicable
Pollutant Release and Transfer Register Law (2023.4.1-)	Not applicable
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) <a href="http://www.safe.nite.go.jp/japan/db.html">http://www.safe.nite.go.jp/japan/db.html</a>
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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

**Record of SDS revisions**

The following contents were revised. 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**