SAFETY DATA SHEET

According to JIS Z 7253:2012

Revision Date 16-Jan-2020

Version 2.01

Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>p-Dodecylbenzenesulfonyl Azide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>322-21332,326-21335</td>
</tr>
<tr>
<td>CAS RN</td>
<td>79791-38-1</td>
</tr>
<tr>
<td>Formula</td>
<td>C18H29N3O2S</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>FUJIFILM Wako Pure Chemical Corporation</td>
</tr>
<tr>
<td></td>
<td>1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan</td>
</tr>
<tr>
<td></td>
<td>Phone: +81-6-6203-3741</td>
</tr>
<tr>
<td></td>
<td>Fax: +81-6-6203-5964</td>
</tr>
<tr>
<td>Supplier</td>
<td>FUJIFILM Wako Pure Chemical Corporation</td>
</tr>
<tr>
<td></td>
<td>1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan</td>
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<td>Phone: +81-6-6203-3741</td>
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<tr>
<td></td>
<td>Fax: +81-6-6203-2029</td>
</tr>
<tr>
<td>Emergency telephone number</td>
<td>+81-6-6203-3741 / +81-3-3270-8571</td>
</tr>
</tbody>
</table>

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Acute toxicity - Oral Category 4
Acute toxicity - Inhalation (Vapors) Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Specific target organ toxicity (single exposure) Category 3

Respiratory tract irritation

Pictograms

Signal word Warning

Hazard statements

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H335 - May cause respiratory irritation

Precautionary statements-(Prevention)

• Wash face, hands and any exposed skin thoroughly after handling
• Do not eat, drink or smoke when using this product
• Avoid breathing dust/fume/gas/mist/vapors/spray
• Use only outdoors or in a well-ventilated area
• Wear protective gloves/protective clothing/eye protection/face protection

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.
• IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
• Rinse mouth.

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
C18H29N3O2S

<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>p-Dodecylbenzenesulfonoyl Azide</td>
<td>0.0027-0.0029 eq/g</td>
<td>351.51</td>
<td>N/A</td>
<td>4-(8)-204</td>
<td>79791-38-1</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.

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**
Do not give shock. Avoid contact with 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**
Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity) Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Storage**

**Safe storage conditions**
- Store away from sunlight in well-ventilated place at room temperature (preferably cool).
- Keep container tightly closed.

**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**
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**
Protection 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  slightly brown - yellow brown
Turbidity  clear
Appearance  liquid
Odor  No data available
pH  No data available
Melting point/freezing point  No data available
Boiling point, initial boiling point and boiling range  No data available
Flash point  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
Vapour pressure  No data available
Vapour density  No data available
Specific Gravity / Relative density  1.05
n-Octanol/water partition coefficient:(log Pow)  No data available
Auto-ignition temperature:  No data available
Decomposition temperature:  140 °C
Viscosity (coefficient of viscosity)  No data available
Dynamic viscosity  No data available

Section 10: STABILITY AND REACTIVITY

Stability

Stability  Stable under recommended storage conditions.
Reactivity  No data available

Hazardous reactions
None under normal processing

Conditions to avoid
Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark, Shock

Incompatible materials
Strong oxidizing agents

Hazardous decomposition products
Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity  No data available

Skin irritation/corrosion  No data available
Serious eye damage/ irritation  No data available
Respiratory or skin sensitization  No data available
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
Aspiration hazard  No data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity  No information available
Other data

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
- Proper shipping name:
- UN classification
- Subsidiary hazard class
- Packing group
- Marine pollutant: Not applicable

IMDG
- 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
- UN number
- Proper shipping name:
- UN classification
- Subsidiary hazard class
- Packing group
- Environmentally Hazardous Substance: Not applicable

Section 15: REGULATORY INFORMATION

International Inventories
- EINECS/ELINCS: Listed
- TSCA: Listed

Japanese regulations
- Fire Service Act: Category V, diazo compounds, dangerous grade 2
- Poisonous and Deleterious Substances Control Law: Not applicable
- Industrial Safety and Health Act: Not applicable
- Regulations for the carriage and storage of dangerous goods in ship: Not applicable
- Civil Aeronautics Law: Not applicable
- Pollutant Release and Transfer: 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, Kyoritsu Publishing Co., Ltd.
etc

Disclaimer
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(2014). *JIS: Japanese Industrial Standards

End of Safety Data Sheet