**SECTION 1 – IDENTIFICATION**

**Product Identifier:** 20% (w/v) Sodium Dodecyl Sulfate (SDS) Solution
Biotechnology Grade

**Catalogue Number:** 2052

**Recommended use of the chemical and restrictions on use:**
Suitable for SDS-based electrophoresis and solubilizing cell membranes.
For R&D use only. Not for pharmaceutical, household or other uses.

**Supplier Information:**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Address</th>
<th>Tel.</th>
<th>Fax.</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axil Scientific Pte Ltd</td>
<td>41 Science Park Road, #04-08 The Gemini</td>
<td>+65 6775 7318</td>
<td>+65 6775 7211</td>
<td><a href="mailto:info@axilscientific.com">info@axilscientific.com</a></td>
</tr>
<tr>
<td>Apical Scientific Sdn Bhd</td>
<td>No 7-1 to 7-4 Jalan SP 2/7, Taman Serdang Perdana, Seksyen 2</td>
<td>+603 8943 3252</td>
<td>+603 8943 3243</td>
<td><a href="mailto:custcare@apicalscientific.com">custcare@apicalscientific.com</a></td>
</tr>
<tr>
<td>Singapore Science Park II</td>
<td>Seri Kembangan 43300, Singapore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore 117610</td>
<td>Selangor Darul Ehsan, Malaysia</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Emergency phone number:**
Monday – Friday, 8:00 a.m. to 6:00 p.m.
+65 6775 7318 (Singapore)
+603 8943 3252 (Malaysia)

**SECTION 2 – HAZARDS IDENTIFICATION**

**GHS Classification:**
Skin irritation, Category 2
Serious eye damage, Category 1
Specific target organ toxicity - single exposure, Category 3

**GHS Hazard Pictogram(s):**

- ![Chemical exposure warning]

**Signal Word:** Danger

**Hazards statements:**
H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.
Precautionary statements:

**Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapour/spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P304 + P340 + P312: 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.
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P332 + P313: If skin irritation occurs: Get medical advice/attention.

**Storage**

P403+P233: Store in a well-ventilated place and keep container tightly closed.

**Disposal**

P501: Dispose of contents/container in accordance with federal, state and local environmental regulations.

### SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS

**Chemical Identity:** Sodium Dodecyl Sulfate

**Synonyms:**
- Sodium Lauryl Sulfate
- Lauryl sulfate sodium salt
- SDS

**Molecular Formula:** C_{12}H_{25}OSO_{3}Na

**Molecular Weight:** 288.38 g/mol

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Dodecyl Sulfate</td>
<td>Flam. Sol. 2; Acute Tox. 4; 2; 1; STOT SE 3; H228, H302, H332, H315, H318, H335</td>
<td>20 – 25 %</td>
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<tr>
<td>CAS-No.</td>
<td>151-21-3</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>205-788-1</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 4 – FIRST-AID MEASURES

**Eye Contact**

Immediately flush eyes with copious amounts of water for at least 15 minutes. Immediately call an ophthalmologist.

**Skin Contact**

Immediately wash skin thoroughly with soap and copious amounts of water. Consult a physician.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration or if breathing is difficult, give oxygen. Consult a physician.
Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed
Sodium dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes, and passive smoking.

Indication of immediate medical attention and special treatment needed
Data not available.

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguishing Media
Use water spray, dry chemical powder, carbon dioxide or alcohol-resistant foam.

Special Exposure Hazards
Carbon oxides, Sulphur oxides, Sodium oxides

Special Fire-fighting Procedures
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Further Information
Data not available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions
Prevent skin/eye contact. Evacuate personnel to safe areas. Avoid breathing vapour, mist or gas.

Environmental Precautions
Do not allow material into sewers and drainage systems.

Methods for Cleaning Up
Clean up spills immediately, observing precautions in the safety data sheet and label. Minimize dust generation. Dispose into a chemical waste container.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Follow all SDS/ label precautions. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities
Store in tightly closed container in a cool, dry and well-ventilated area.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits
We are not aware of any national exposure limit.

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice.

**Eye/ Face Protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin/ Hand Protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

- **Full contact**
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min

- **Splash contact**
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body protection**
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **a) Appearance**
  - Clear colorless liquid
- **b) Odour**
  - Not available
- **c) Odour Threshold**
  - Not available
d) pH (10g/l @ 20°C) Not available

e) Melting/freezing point Not available

f) Initial boiling point and boiling range Not available

g) Flash point Not available

h) Evaporation rate Not available

i) Flammability (solid, gas) Not available

j) Upper/lower flammability or explosive limits Not available

k) Vapour pressure Not available

l) Vapour density Not available

m) Relative density 1.03 g/mL @ 20°C

n) Water solubility Not available

o) Partition coefficient: n-octanol/water Not available

p) Autoignition temperature Not available

q) Decomposition temperature Not available

r) Viscosity Not available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity
Data not available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Data not available.

Conditions to avoid
Heat, flames, ignition sources and incompatibles.

Incompatible material
Strong oxidizing agents.

Hazardous decomposition products
## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute toxicity
Data not available.

### Skin corrosion/irritation
Data not available.

### Serious eye damage/eye irritation
Data not available.

### Respiratory or skin sensitization
Data not available.

### Germ cell mutagenicity
Data not available.

### Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity
Data not available.

### Specific target organ toxicity – single exposure
Data not available.

### Specific target organ toxicity – repeated exposure
Data not available.

### Aspiration hazard
Data not available.

### Other information
RTECS: Not available

## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity
Data not available.

### Persistence and degradability
Data not available.

### Bioaccumulative potential
Data not available.

### Mobility in soil
Data not available.
Other adverse effect
Harmful to aquatic life.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose off as unused product.

SECTION 14 – TRANSPORT INFORMATION

UN Number
ADR/RID: - IMGD: - IATA-DGR: -

UN Proper Shipping Name:
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA-DGR: Not dangerous goods

Transport Hazard Class(es)
ADR/RID: - IMDG: - IATA-DGR: -

Packing Group
ADR/RID: - IMDG: - IATA-DGR: -

Environmental Hazards
ADR/RID: no IMDG: marine pollutant: no IATA-DGR: no

Special Precaution for Users
Data not available.

SECTION 15 – REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Data not available.

SECTION 16 – OTHER INFORMATION

Date of Issue: JULY 11, 2008 Date of Revision: MAY 01, 2017

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. Axil Scientific Pte Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.