SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identification:

**Product Name:** Diethyl phthalate
**Synonyms:** Ethyl phthalate
**CAS-No:** 84-66-2
**EC-No.:** 201-550-6
**Catalog Codes:** 80584, 10584, 50584, 98584, 90584, 97584

**Molecular Formula:** C_{12}H_{14}O_{4}

**REACH Registration No:** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

**Relevant identified uses of the substance or mixture and uses advised against:**

**Identified Uses:** Pharma excipient and laboratory reagent, not for food

**Details of the supplier of the safety data sheet:**

- **Company**
  Finar Limited
  184-186/P, Chacharwadi Vasna,
  Sarkhej-Bavla Highway,
  Ta: Sanand, Dist.: Ahmedabad,
  Email: info@finarchemicals.com
  Web: www.finarchemicals.com

- **E-mail Address**
  safety@finarchemicals.com;
  info@finarchemicals.com

1.2. Emergency Telephone Number:

- For Emergency Contact No: +91 - 2717 - 616 717
- Registered office No: +91 - 79 – 40040085
**SECTION 2: HAZARDS IDENTIFICATION**

2.1 Classification of the substance or mixture:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label Elements:
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other Hazards:
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.1 Substances: Diethyl Phthalate CAS No. 84-66-2

3.2 Mixtures:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>EC-No.</th>
<th>Molar mass</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethyl Phthalate</td>
<td>84-66-2</td>
<td>201-550-6</td>
<td>222.24 g/mol</td>
<td>&gt;95</td>
</tr>
</tbody>
</table>

**SECTION 4: FIRST AID MEASURES**

4.1 Description of First Aid Measures:

**General information**: Consult a physician. Show this safety data sheet to the doctor in attendance.

**Eye Contact**: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Skin Contact**: Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Serious Skin Contact**: Not Available

**Inhalation**: Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial respiration. Obtain medical attention.

**Serious Inhalation**: Not Available

**Ingestion**: Do not induce vomiting. Call a physician or Poison Control Center immediately.

**If swallowed**: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
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4.2 Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed:
Not Available

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture
Carbon dioxide

5.3 Special Protective Equipment for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further Information (Precautions)
Not Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
For personal protection see section 8.

6.2 Environmental precautions:
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up:
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:
Disposal considerations: see section 13
SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling
For precautions see section 2.2.

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

7.3 Specific end use(s):
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:
Components with workplace control parameters

8.2 Exposure Controls:
Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment:

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

Skin 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 Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

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:** Impervious clothing. 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 not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. 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

9.1 Information on basic physical and chemical properties:

- **Physical state and appearance:** Liquid, Light Yellow
- **Odour:** Odorless
- **Taste:** Not Available
- **Color:** Light Yellow
- **pH:** Not Available
- **Melting Point:** Not Available
- **Boiling Point:** 298 - 299 °C / 568.4 - 570.2 °F @ 760 mmHg
- **Flash Point:** 156 °C / 312.8 °F
- **Molecular Weight:** 222.24 g/mol
- **Critical Temperature:** Not Available
- **Specific Gravity:** 1.118
- **Vapor Pressure:** 19 hPa at 163 °C
- **Vapor Density:** 7.7 - (Air = 1.0)
- **Flammability or explosive limits:**
  - **Upper:** Not Available
  - **Lower:** 0.75 % (V)
- **Solubility:** 1 g/l (20°C)
- **Autoignition Temperature:** 440 °C at 984 hPa
Diethyl phthalate

Viscosity: Not Available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available
10.2 Chemical Stability: Stable under normal conditions. Light sensitive.
10.3 Possibility of Hazardous Reactions: Not Available
10.4 Conditions to Avoid: Not Available
10.5 Incompatible Materials: Oxidizing agents, acids
10.6 Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions.
   Other decomposition products - No data available
   In the event of fire: see section 5
10.7 Hazardous Polymerization: Hazardous polymerization does not occur.
10.8 Hazardous Reactions: None under normal processing.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:
   Acute toxicity
   LD50 Oral - Rat - male and female - 5.591 mg/kg
   (OECD Test Guideline 401)
   LC50 Inhalation - Rat - 6 h - >= 4.64 mg/l
   Remarks: (ECHA)
   LD50 Dermal - Rat - male and female - > 11.181 mg/kg
   Remarks: (ECHA)
   Skin corrosion/irritation
   Skin - Rabbit
   Result: No skin irritation - 24 h
   Remarks: (ECHA)
   Serious eye damage/eye irritation
   Eyes - Rabbit
Result: No eye irritation - 48 h  
Remarks: (ECHA)  
**Respiratory or skin sensitisation**  
Buehler Test - Guinea pig  
Result: negative  
(OECD Test Guideline 406)  
**Germ cell mutagenicity**  
No data available  
In vitro mammalian cell gene mutation test  
mouse lymphoma cells  
Result: negative  
Chromosome aberration test in vitro  
Human lymphocytes  
Result: negative  
Ames test  
Escherichia coli/Salmonella typhimurium  
Result: negative  
**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 Effects:** No information available  
**Developmental Effects:** No information available  
**Teratogenicity:** No information available  
**STOT - single exposure:** No information available  
**STOT - repeated exposure:** No information available  
**Aspiration hazard:** No information available  
**Symptoms / effects, both acute and delayed:** No information available  
**Endocrine Disruptor Information:** No information available  
**Other Adverse Effects:** Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level -150 mg/kg (ECHA)  
RTECS: TI1050000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:
Toxicity to fish: flow-through test LC50 - Cyprinodon variegatus (sheepshead minnow) - 29 mg/l - 96 h (US-EPA)
flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) – 12 mg/l - 96 h (US-EPA)

Toxicity to daphnia and other aquatic invertebrates:
static test LC50 - Daphnia magna (Water flea) - 90 mg/l - 48 h (US-EPA)

Toxicity to algae: static test EC50 - Desmodesmus subspicatus (green algae) - 45 mg/l - 72 h (OECD Test Guideline 201)

12.2 Persistence and degradability Persistence:
Biodegradability: aerobic - Exposure time 28 d
Result: 94.6 % - Readily biodegradable.
Remarks: (ECHA)

12.3 Bio Accumulative Potential: No information available

12.4 Mobility in soil: No information available

12.5 Results of PBT and vPvB Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other Adverse Effects:
Harmful to aquatic life.
No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Methods:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
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SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Land Transport (ADR/RID)</th>
<th>Air Transport (IATA)</th>
<th>Sea Transport (IMDG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN number</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.2 Proper shipping name</td>
<td>Not dangerous goods</td>
<td>Not dangerous goods</td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td>14.3 Class</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.5 Environmentally hazardous</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: OTHER INFORMATION

References: Not available

Created: 27/02/2020
Finar Limited

Material Safety Data Sheet

| Product Name | Diethyl phthalate |

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