DIMETHYL ADIPATE  
CAS NO 627-93-0  

MATERIAL SAFETY DATA SHEET  
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers  
Product name : Dimethyl adipate  
CAS-No. : 627-93-0  

1.2 Relevant identified uses of the substance or mixture and uses advised against  
Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet  
Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi -110002  
INDIA  
Telephone : +91 11 49404040  
Email : care@cdhfinechemical.com  

1.4 Emergency telephone number  
Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

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.

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  
Formula : C_{8}H_{14}O_{4}  
Molecular weight : 174.2 g/mol  
CAS-No. : 627-93-0  
EC-No. : 211-020-6

No components need to be disclosed according to the applicable regulations.
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data 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 materials for containment and cleaning up
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal 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
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Combustible liquids

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

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.

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

a) Appearance Form: clear, liquid
   Colour: colourless

b) Odour ester-like

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point Melting point/range: 8 °C - lit.

f) Initial boiling point and boiling range 109 - 110 °C at 19 hPa - lit.

g) Flash point 110 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits Upper explosion limit: 8.1 % (V)
   Lower explosion limit: 0.8 % (V)

k) Vapour pressure 0.06 mmHg at 20 °C

l) Vapour density No data available

m) Relative density 1.062 g/mL at 20 °C

n) Water solubility 25 g/l at 20 °C
9.2 Other safety information

Surface tension 35.86 mN/m at 20 °C

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
acids, Bases, Oxidizing agents, Reducing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - male and female - > 5,000 mg/kg(Dimethyl adipate)
LD50 Dermal - Rabbit - male and female - > 1,000 mg/kg(Dimethyl adipate)
(OECD Test Guideline 402)

Skin corrosion/irritation
Skin - Rabbit(Dimethyl adipate)
Result: No skin irritation - 4 h

Serious eye damage/eye irritation
Eyes - Rabbit(Dimethyl adipate)
Result: No eye irritation

Respiratory or skin sensitisation
No data available(Dimethyl adipate)

Germ cell mutagenicity
OECD Test Guideline 474(Dimethyl adipate)
Rat - male and female
Result: negative
Carcinogenicity
No data available (Dimethyl adipate)
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

Specific target organ toxicity - single exposure
No data available (Dimethyl adipate)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available (Dimethyl adipate)

Additional Information
RTECS: AV1645000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Dimethyl adipate)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 72 mg/l - 48 h (Dimethyl adipate) (OECD Test Guideline 202)
Toxicity to algae static test - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (Dimethyl adipate) (OECD Test Guideline 201)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available (Dimethyl adipate)

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 treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
14.3 Transport hazard class(es)
    ADR/RID: -  IMDG: -  IATA: -

14.4 Packaging group
    ADR/RID: -  IMDG: -  IATA: -

14.5 Environmental hazards
    ADR/RID: no  IMDG Marine pollutant: no  IATA: no

14.6 Special precautions for user
    No data available

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

Further information
    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. It does not represent
    any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not
    be held liable for any damage resulting from handling or from contact with the above product. See
    www.cdhfinechemical.com for additional terms and conditions of sale.