

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

<b>Catalogue Number</b>	CS-ED-01127
<b>Product Name</b>	Formetanate
<b>CAS No.</b>	22259-30-9
<b>Category</b>	Fine Chemicals
<b>Synonyms</b>	3-(((dimethylamino)methylene)amino)phenyl methylcarbamate
<b>Brand</b>	Clearsynth Labs Ltd.
<b>Identified uses</b>	Laboratory Chemicals
<b>Uses advised against</b>	Not available
<b>Company</b>	Clearsynth Labs Ltd. Mumbai, India
<b>Emergency Phone #</b>	+91-22-245045900
<b>REACH No.</b>	Not available

### SECTION 2: Hazards identification

**Disclaimer:** This is sample MSDS. Please email [sales@clearsynth.com](mailto:sales@clearsynth.com) for more details.

#### 2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

#### 2.2 Label Elements

**Signal Word:** Warning



#### Hazard Statement(s)

Code	Statement
H300	Not available
H317	May cause an allergic skin reaction.
H330	Not available
H400	Not available

H410	Not available
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**Precautionary Statement(s)**

Code	Statement
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P272	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Not available
P301+P316	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316	Not available
P320	Not available
P321	Specific treatment (see ... on this label).
P330	Not available
P333+P317	Not available
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation

**SECTION 3: Composition / information on ingredients**

3.1 Substance

Component : Formetanate

CAS Number : 22259-30-9

Molecular Formula : C<sub>11</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>

Molecular Weight : 221.26

Parent Chemical : Formetanate

Synonyms : 3-(((dimethylamino)methylene)amino)phenyl methylcarbamate

Concentration : Not available

### SECTION 4: First aid measures

Not available

### SECTION 5: Firefighting measures

Not available

### SECTION 6: Accidental release measures

Not available

### SECTION-7: Handling and storage

Not available

### SECTION 8: Exposure controls / personal protection

Not available

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available

Property	Value
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

### SECTION 10: Stability and reactivity

Not available

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

- Acute toxicity: Acute exposure to cholinesterase inhibitors can cause a cholinergic crisis characterized by severe nausea/vomiting, salivation, sweating, bradycardia, hypotension, collapse, and convulsions. Increasing muscle weakness is a possibility and may result in death if respiratory muscles are involved. Accumulation of ACh at motor nerves causes overstimulation of nicotinic expression at the neuromuscular junction. When this occurs symptoms such as muscle weakness, fatigue, muscle cramps, fasciculation, and paralysis can be seen. When there is an accumulation of ACh at autonomic ganglia this causes overstimulation of nicotinic expression in the sympathetic system. Symptoms associated with this are hypertension, and hypoglycemia. Overstimulation of nicotinic acetylcholine receptors in the central nervous system, due to accumulation of ACh, results in anxiety, headache, convulsions, ataxia, depression of respiration and circulation, tremor, general weakness, and potentially coma. When there is expression of muscarinic overstimulation due to excess acetylcholine at muscarinic acetylcholine receptors symptoms of visual disturbances, tightness in chest, wheezing due to bronchoconstriction, increased bronchial secretions, increased salivation, lacrimation, sweating, peristalsis, and urination can occur. Chronically high (>10 years) exposure leads to neuropsychological consequences including disturbances in perception and

visuo-motor processing (A15321).

- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: Acute exposure to cholinesterase inhibitors can cause a cholinergic crisis characterized by severe nausea/vomiting, salivation, sweating, bradycardia, hypotension, collapse, and convulsions. Increasing muscle weakness is a possibility and may result in death if respiratory muscles are involved. Accumulation of ACh at motor nerves causes overstimulation of nicotinic expression at the neuromuscular junction. When this occurs symptoms such as muscle weakness, fatigue, muscle cramps, fasciculation, and paralysis can be seen. When there is an accumulation of ACh at autonomic ganglia this causes overstimulation of nicotinic expression in the sympathetic system. Symptoms associated with this are hypertension, and hypoglycemia. Overstimulation of nicotinic acetylcholine receptors in the central nervous system, due to accumulation of ACh, results in anxiety, headache, convulsions, ataxia, depression of respiration and circulation, tremor, general weakness, and potentially coma. When there is expression of muscarinic overstimulation due to excess acetylcholine at muscarinic acetylcholine receptors symptoms of visual disturbances, tightness in chest, wheezing due to bronchoconstriction, increased bronchial secretions, increased salivation, lacrimation, sweating, peristalsis, and urination can occur. Chronically high (>10 years) exposure leads to neuropsychological consequences including disturbances in perception and visuo-motor processing (A15321).
- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- Acute exposure to cholinesterase inhibitors can cause a cholinergic crisis characterized by severe nausea/vomiting, salivation, sweating, bradycardia, hypotension, collapse, and convulsions. Increasing muscle weakness is a possibility and may result in death if respiratory muscles are involved. Accumulation of ACh at motor nerves causes overstimulation of nicotinic expression at the neuromuscular junction. When this occurs symptoms such as muscle weakness, fatigue, muscle cramps, fasciculation, and paralysis can be seen. When there is an accumulation of ACh at autonomic ganglia this causes overstimulation of nicotinic expression in the sympathetic system. Symptoms associated with this are hypertension, and hypoglycemia. Overstimulation of nicotinic acetylcholine receptors in the central nervous system, due to accumulation of ACh, results in anxiety, headache, convulsions, ataxia, depression of respiration and circulation, tremor, general weakness, and potentially coma. When there is expression of muscarinic overstimulation due to excess acetylcholine at muscarinic acetylcholine receptors symptoms of visual disturbances, tightness in chest, wheezing due to bronchoconstriction, increased bronchial secretions, increased salivation, lacrimation, sweating, peristalsis, and urination can occur. Chronically high (>10 years) exposure leads to neuropsychological consequences including disturbances in perception and visuo-motor processing (A15321).

## SECTION 12: Ecological information

Not available

### SECTION 13: Disposal considerations

Not available

### SECTION 14: Transport information

Not available

### SECTION 15: Regulatory information

Not available

### SECTION 16: Other information

Not available

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