



DR. J. PHARMACHEM (INDIA)

<b>MATERIAL SAFETY DATA SHEET</b>	
<b>1</b>	<b>IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING</b>
<b>1.1</b>	<b>Product identifiers</b>
	Product Name Ethyl oxamate
	CAS NO. 617-36-7
<b>1.2</b>	<b>Relevant identified uses of the substance or mixture and uses advised against</b>
	Identified uses Laboratory chemicals, Manufacture of substances
<b>1.3</b>	<b>Details of the supplier of the safety data sheet</b>
	COMPANY DR. J. PHARMACHEM (INDIA)
	722/AB/15 'NIRMAL', LAXMI PARK COLONY,
	NAVI PETH , PUNE- 411 030.INDIA
	Telephone : 020-24530071
	Fax : 020-24530110
<b>2</b>	<b>HAZARDS IDENTIFICATION</b>
<b>2.1</b>	<b>Classification of the substance or mixture</b>
	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.
<b>2.2</b>	<b>Label elements</b>
	The product does not need to be labelled in accordance with EC directives or respective national laws.
<b>2.3</b>	<b>Other hazards</b> none
<b>3</b>	<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>
<b>3.1</b>	<b>Substances</b>
	Synonyms Aceticacid, aminooxo-, ethyl ester (9CI); Oxamic acid, ethyl ester (6CI,7CI,8CI); 2-Amino-2-(oxo)acetic acid ethyl ester; Ethoxalamide; Ethyl2-amino-2-oxoacetate;
	Formula $C_4H_7NO_3$
	Molecular Weight 117.1 g/mol
	<b>Component Concentration</b>
	Ethyl oxamate Min 98%
	Other unknown impurities Up to 2%
<b>4</b>	<b>FIRST AID MEASURES</b>
<b>4.1</b>	<b>Description of first aid measures</b>
	<b>If inhaled</b> If breathed in, move person into fresh air. If not breathing, give artificial respiration.



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	<b>In case of skin contact</b>	Wash off with soap and plenty of water.
	<b>In case of eye contact</b>	Flush eyes with water as a precaution
	<b>If swallowed</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water.
4.2	<b>Most important symptoms and effects, both acute and delayed</b>	
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
4.3	<b>Indication of any immediate medical attention and special treatment needed</b>	
	No data available	
5	<b>FIREFIGHTING MEASURES</b>	
5.1	<b>Extinguishing media</b>	
	<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	<b>Special hazards arising from the substance or mixture</b>	Carbon oxides, nitrogen oxides (NOx)
5.3	<b>Advice for firefighters</b>	Wear self contained breathing apparatus for firefighting if necessary
5.4	<b>Further information</b>	No data available
6	<b>ACCIDENTAL RELEASE MEASURES</b>	
6.1	<b>Personal precautions, protective equipment and emergency procedures</b>	
	Avoid dust formation. Avoid breathing vapors, mist or gas.	
6.2	<b>Environmental precautions</b>	
	Do not let product enter drains	
6.3	<b>Methods and materials for containment and cleaning up</b>	
	Sweep up and shovel. Keep in suitable, closed containers for disposal	
6.4	<b>Reference to other sections</b>	
	For disposal see section 13.	
7	<b>HANDLING AND STORAGE</b>	
7.1	<b>Precautions for safe handling</b>	
	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.	
7.2	<b>Conditions for safe storage, including any incompatibilities</b>	
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.	
7.3	<b>Specific end uses</b>	
	no data available	
8	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
8.1	<b>Control parameters</b>	
	<b>Components with workplace control parameter</b>	
8.2	<b>Exposure control</b>	
	<b>Appropriate engineering controls</b>	
	General industrial hygiene practice.	
	<b>Personal protective equipment</b>	
	<b>Eye/face protection</b>	
	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
	<b>Skin protection</b>	
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique	



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	(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.	
	<b>Body Protection</b>	
	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 e.	
	<b>Respiratory protection</b>	
	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).	
9	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>	
9.1	<b>Information on basic physical and chemical properties</b>	
a)	Appearance	Form : Crystalline powder Colour : White
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	pH	No data available
e)	Melting range/freezing point	116 - 120 °C
f)	Initial boiling point and boiling range	188.7 °C at 760 mmHg
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	No data available
n)	Solubility	Solubility(50 mg/ml),H <sub>2</sub> O
o)	Partition coefficient: octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available
9.2	<b>Other safety information</b>	
	IUPAC Name	Acetic acid,2-amino-2-oxo-, ethyl ester
	Molecular Formula	C <sub>4</sub> H <sub>7</sub> NO <sub>3</sub>
	Molecular Weight	117.10
	SMILES	O=C(N)C(=O)OCC
	InChI	InChI=1/C4H7NO3/c1-2-8-4(7)3(5)6/h2H2,1H3,(H2,5,6)
	EINECS	210-512-8
10	<b>STABILITY AND REACTIVITY</b>	
10.1	<b>Reactivity</b>	No data available



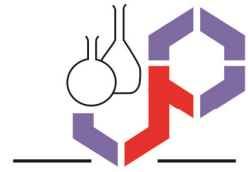
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10.2	<b>Chemical stability</b>	No data available
10.3	<b>Possibility of hazardous reactions</b>	No data available
10.4	<b>Conditions to avoid</b>	No data available
10.5	<b>Incompatible materials</b>	Strong oxidizing agents
10.6	<b>Hazardous decomposition products</b>	Other decomposition products - no data available
11	<b>TOXICOLOGICAL INFORMATION</b>	
11.1	<b>Information on toxicological effects</b>	
	<b>Acute toxicity</b>	No data available
	<b>Skin corrosion/irritation</b>	No data available
	<b>Serious eye damage/eye irritation</b>	No data available
	<b>Respiratory or skin sensitization</b>	No data available
	<b>Germ cell mutagenicity</b>	No data available
	<b>Carcinogenicity</b>	
	IARC	No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	<b>Reproductive toxicity</b>	No data available
	<b>Specific target organ toxicity - single exposure</b>	No data available
	<b>Specific target organ toxicity - repeated exposure</b>	No data available
	<b>Aspiration hazard</b>	No data available
	<b>Potential health effects</b>	
	<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
	<b>Ingestion</b>	May be harmful if swallowed.
	<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
	<b>Eyes</b>	May cause eye irritation.
	<b>Signs and Symptoms of Exposure</b>	
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
	<b>Additional Information</b>	
	RTECS	Not available
12	<b>ECOLOGICAL INFORMATION</b>	
12.1	<b>Toxicity</b>	No data available
12.2	<b>Persistence and degradability</b>	No data available
12.3	<b>Bioaccumulative potential</b>	No data available
12.4	<b>Mobility in soil</b>	No data available
12.5	<b>Results of PBT and vPvB assessment</b>	No data available
12.6	<b>Other adverse effects</b>	No data available
13	<b>DISPOSAL CONSIDERATIONS</b>	
13.1	<b>Waste treatment methods</b>	
	<b>Product</b>	
	Offer surplus and non-recyclable solutions to a licensed disposal company.	
	<b>Contaminated packaging</b>	



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	Dispose of as unused product.		
14	<b>TRANSPORT INFORMATION</b>		
14.1	<b>UN number</b>		
	ADR/RID	IMDG	IATA
	-	-	-
14.2	<b>UN proper shipping name</b>		
	ADR/RID	IMDG	IATA
	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	<b>Transport hazard class(es)</b>		
	ADR/RID	IMDG	IATA
	-	-	-
14.4	<b>Packaging group</b>		
	ADR/RID	IMDG	IATA
	-	-	-
14.5	<b>Environmental hazards</b>		
	ADR/RID	IMDG Marine pollutant	IATA
	no	no	no
14.6	<b>Special precautions for user</b>		
	no data available		
15	<b>REGULATORY INFORMATION</b>		
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.		
15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>		
	no data available		
15.2	<b>Chemical Safety Assessment</b>		
	no data available		
16	<b>OTHER INFORMATION</b>		
	<b>Further information</b>		
	<p>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. Dr J Pharmachem (India) and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See <a href="http://www.jpharmachem.com">www.jpharmachem.com</a> and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.</p> <p>Month of Creation : October 2013 Month of Revision : October 2016</p>		



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