

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 19.12.2011

Revision: 02.07.2011

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

- **Product identifier**
- **Trade name:** Dimethoxymethane
- **CAS Number:**
109-87-5
- **EC number:**
203-714-2
- **Registration number** Please provide the pre-registration number
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation used in pharmaceuticals**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Kairav Chemofarbe Industries Ltd.
Regd Office: 502, filix, LBS Marg,
Opposite Asian Paints, Bhandup
(w) Mumbai-400078..
- **Further information obtainable from:**
Phone : +(91)-(22)-25968361/
62 Fax : +(91)-(22)-25958586
Email : kairav@chemofarbe.com
- **Emergency telephone number:**
Contact details of European
importer Emergency telephone
number: Telephone number of EU
importer: Opening hours:
Other Comments (e.g. language(s) of the phone service): English



2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Highly flammable

R11: Highly flammable.

- **Information concerning particular hazards for human and environment:** Not applicable.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
H225 Highly flammable liquid and vapour.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)

IN

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Trade name: Dimethoxymethane

(Contd. of page 1)

- P240 Ground/bond container and receiving equipment.
- P303+P361+P353 **IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
109-87-5 dimethoxymethane
- **Identification number(s)**
- **EC number:** 203-714-2
- **Additional information:**
Molecular formula : C3H8O2
Molecular weight : 76.09

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Assure fresh air breathing. Obtain medical attention if breathing difficulty persists.
- **After skin contact:** Wash skin thoroughly with mild soap and water.
- **After eye contact:**
Rinse immediately with plenty of water. obtain emergency medical attention if pain, blinking, tears or redness persist.
- **After swallowing:**
If swallowed, immediately administer water (1/2 liter) only if victim is completely conscious/alert and induce immediately vomiting. Seek medical attention immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Foam. dry chemical. Carbon dioxide. Water spray.
- **Special hazards arising from the substance or mixture** May form flammable vapour-air mixture.
- **Advice for firefighters**
- **Protective equipment:**
Do not enter fire area without proper protective equipment, including respiratory protection.
- **Additional information** Use water spray or fog cooling exposed containers.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
No smoking. Respiratory protection equipment may be necessary. Equip cleanup crew with proper protection.
- **Environmental precautions:**
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

(Contd. on page 3)

IN

Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 02.07.2011

Trade name: Dimethoxymethane

(Contd. of page 2)

- **Methods and material for containment and cleaning up:**
Clean up any spills as soon as possible, using an absorbent material to collect it. Use suitable disposal containers. Dilute residues and flush.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Handling in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.
Do not use compressed air to either agitate or transfer the contents of storage containers (tanks)/shipping drums containing this material.
- **Information about fire - and explosion protection:**
No naked lights. No smoking.
Use special care to avoid static electric charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in dry, cool, well-ventilated area.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
Keep container closed when not in use. Storage-away from: heat sources.
- **Specific end use(s)** Used in Pharmaceutical Industry

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols.
- **Respiratory protection:** where excessive vapour may result, wear approved mask.
- **Protection of hands:** In case of repeated or prolonged contact wear gloves.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles
- **Body protection:**
No special clothing/skin protection equipment is recommended under normal conditions use.

IN

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.12.2011

Revision: 02.07.2011

Trade name: Dimethoxymethane

(Contd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Colour:	Colourless
· Odour:	Pungent
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-104.8°C
Boiling point/Boiling range:	42.3°C
· Flash point:	-30.5°C (at 101.3 kPa)
· Flammability (solid, gaseous):	Not applicable. Highly flammable
· Ignition temperature:	260°C (at 760 mm Hg)
· Decomposition temperature:	Not determined.
· Self-igniting:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20°C:	40 kPa
· Density at 20°C:	0.861 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Very soluble
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Reacts with strong acids.
May form flammable vapour-air mixture
- **Conditions to avoid** Overheating. Sparks. open flame.
- **Incompatible materials:** Strong acids
- **Hazardous decomposition products:** Thermal decomposition generates carbon dioxide.

IN (Contd. on page 5)

Safety data sheet

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Revision: 02.07.2011

Trade name: Dimethoxymethane

(Contd. of page 4)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

Oral	LD50	6423 mg/kg bw (rat)
Dermal	LD50	> 5000 mg/kg bw (rabbit)
Inhalative	LC50 (7 hrs)	ca. 57000 mg/m ³ air (mouse)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Toxicity**

- **Acquatic toxicity:**

EC50 (48 hrs)	> 1200 mg/L (Daphnia magna)
EC50 (96 hrs)	6.36 g/L (Pimephales Promelas (Fathead Minnow))
LC50 (48 hrs)	> 1000 mg/L (Daphnia magna)
LC50 (96 hrs)	6.99 g/L (Pimephales promelas (Fish, fresh water))
	> 1000 mg/L (Brachydanio rerio (Fish, Freshwater))

- **Persistence and degradability**

- **Degradability:**

Methylal is not biodegradable in natural conditions.

- **Behaviour in environmental systems:**

- **Bioaccumulative potential**

The BCF for methylal, estimated from its octanol/water partition coefficient, 0.00, using a recommended regression equation (Lyman et al., 1990) is 0.6 (SRC). Therefore, methylal should not bioconcentrate in fish and aquatic organisms.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

Incinerate liquid residues.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 6)

IN

Safety data sheet
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Revision: 02.07.2011

Trade name: Dimethoxymethane

(Contd. of page 5)

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number	
· ADR, IMDG, IATA	1234
· UN proper shipping name	
· ADR	1234 METHYLAL
· IMDG, IATA	METHYLAL
· Transport hazard class(es)	
· ADR	
	
· Class	3 Flammable liquids.
· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· Packing group	
· ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Tunnel restriction code	D/E
· UN "Model Regulation":	UN1234, METHYLAL, 3, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
- **Hazard pictograms** Please refer section 2
- **Signal word** Danger
- **Hazard statements** Please refer section 2
- **Precautionary statements** Please refer section 2
- **Chemical safety assessment:**
A Chemical Safety Assessment has not been carried out and shall be available at the time of REACH registration.

(Contd. on page 7)

IN

Safety data sheet
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Revision: 02.07.2011

Trade name: *Dimethoxymethane*

(Contd. of page 6)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department.

· **Contact:**

Phone : +(91)-(22)-25968361/

62 Fax : +(91)-(22)-25958586

Email : kairav@chemofarbe.com

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· **Sources**

• **REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006**

• **Data from ECHA website:**

<http://apps.echa.europa.eu/registered/data/dossiers/DISS-9d932e3d-97e9-5b1b-e044-00144f67d249/DISS-9d932e3d-97e9-5b1b-e044-00144f67d249 DISS-9d932e3d-97e9-5b1b-e044-00144f67d249.html>

· *** Data compared to the previous version altered.**

Section 2: Hazard identification.

Section 4: First-aid measures.

Section 5: Fire-fighting measures

Section 6: Accidental Release measures

Section 7: Handling and storage. Section

8: Exposure Controls/Personal

protection. Section 9: Physical and Chemical

properties. Section 10: Stability and Reactivity.

Section 11: Toxicological Information. Section

12: Ecological Information.

Section 13: Disposal considerations

Section 14: Transport information

Section 15: Regulatory information