



**LEONID CHEMICALS PVT. LTD.,  
BANGALORE**

An ISO-9001:2008 Certified Company

**Quality Assurance Department**

(CODE) DOCUMENT : WI

(CODE) SECTION : WI/SM

(DATE) : 01.04.2011



Issue : 02

Rev.: 00

Title: MATERIAL SAFETY DATA SHEET (MSDS): AMINOACETALDEHYDE DIMETHYLACETAL

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## SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Aminoacetaldehyde dimethylacetal

Catalog Numbers: A454

Synonyms: 2,2-Dimethoxyethylamine

CAS-No. : 22483-09-6

Company Information:

**LEONID CHEMICALS Pvt Ltd,**  
62/A2, 1<sup>st</sup> Stage,  
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## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 3), H226

Skin corrosion (Category 1B), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

C Corrosive R10, R34

For the full text of the R-phrases mentioned in this Section, see Section 16.

### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Signal word **Danger**

Hazard statement(s)

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.  
Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.



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Supplemental Hazard  
Statements none

2.3 Other hazards - none

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Chemical characterization : Natural product

Formula : C<sub>4</sub>H<sub>11</sub>NO<sub>2</sub>

Molecular Weight : 105,14 g/mol

CAS-No. : 22483-09-6

EC-No. : 245-026-5

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>2,2-Dimethoxyethylamine</b>		
CAS-No.22483-09-6 EC-No. 245-026-5	Flam. Liq. 3; Skin Corr. 1B; H226, H314	<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
<b>2,2-Dimethoxyethylamine</b>		
CAS-No.22483-09-6 EC-No. 245-026-5	C, R10 - R34	<= 100 %

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### 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**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**



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Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Do NOT induce vomiting. 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**

#### **Suitable extinguishing media**

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

#### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

#### **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### **5.4 Further information**

Use water spray to cool unopened containers.

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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.

#### **6.3 Methods and materials for containment and cleaning up**



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Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

A part 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

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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.



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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Full contact

Material: butyl-rubber

Minimum layer thickness: 0,3 mm

Break through time: 480 min

Material tested: Butoject

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: 30 min

Material tested: Dermatrill

test method: EN374

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

Complete suit protecting against chemicals, Flame retardant antistatic protective 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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.

### SECTION 9: Physical and chemical properties

Physical State	: Liquid
Appearance	: Light yellow
odor	: odorless
pH	: No information available.
Vapor Density	: 3.6
Viscosity	: 0.15 Pa.s at 20 °C
Boiling Point/Range	: 135 - 139°C / 275 - 282°F@ 95 mmHg
Melting Point/Range	: No information available.



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Flash Point : 41°C / 105.8°F  
Autoignition Temperature : No information available.  
Water Solubility : miscible  
Specific Gravity : 0.970  
Molecular Formula : C4 H11 N O2  
Molecular Weight : 105.14

### 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**  
Heat, flames and sparks.
- 10.5 Incompatible materials**  
Strong oxidizing agents, Strong acids
- 10.6 Hazardous decomposition products**  
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**  
no data available
- Skin corrosion/irritation**  
no data available
- Serious eye damage/eye irritation**  
no data available
- Respiratory or skin sensitisation**  
no data available
- Germ cell mutagenicity**  
no data available



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#### **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 toxicity**

no data available

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

no data available

#### **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **SECTION 12: Ecological information**

#### **12.1 Toxicity**

no data available

#### **12.2 Persistence and degradability**

no data available

#### **12.3 Bioaccumulative potential**

no data available

#### **12.4 Mobility in soil**

no data available

#### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### **12.6 Other adverse effects**

no data available

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods**

Product



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Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**  
Dispose of as unused product.

#### SECTION 14: Transport information

- 14.1 UN number**  
ADR/RID: 1993 IMDG: 1993 IATA: 1993
- 14.2 UN proper shipping name**  
ADR/RID: FLAMMABLE LIQUID, N.O.S. (2,2-Dimethoxyethylamine)  
IMDG: FLAMMABLE LIQUID, N.O.S. (2,2-Dimethoxyethylamine)  
IATA: Flammable liquid, n.o.s. (2,2-Dimethoxyethylamine)
- 14.3 Transport hazard class(es)**  
ADR/RID: 3 IMDG: 3 IATA: 3
- 14.4 Packaging group**  
ADR/RID: III IMDG: III IATA: III
- 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

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

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
no data available
- 15.2 Chemical Safety Assessment**  
For this product a chemical safety assessment was not carried out





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## SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.

