



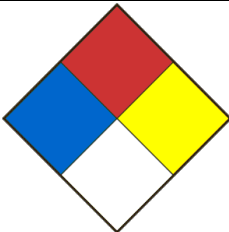
Centre Anti-Poison pour le Québec: (800) 463-5060  
Tél. (Qc): (418) 660-8666 / 800-890-8666  
Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

|                                                                                                                                         |                                    |                                             |                       |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------|-----------------------|
| Product Identifier<br>DIMETHYL CARBONATE                                                                                                |                                    | Product Use<br>Laboratory use               |                       |
| Chemical formula<br>$C_3H_6O_3$                                                                                                         |                                    | Product code<br>DR-0182; DR-0982            | Molar weight<br>90,08 |
| Chemical name / Commercial name / Synonyms<br>METHYLE CARBONATE, CARBONIC ACID DIMETHYL ESTER, DIMETHYL CARBONATE, CARBONATE DE METHYLE |                                    |                                             |                       |
| Supplier's name<br>Laboratoire MAT                                                                                                      |                                    | Address-Street<br>610, Adanac Street        |                       |
| City<br>Québec                                                                                                                          |                                    | Province<br>Québec                          |                       |
| Postal code<br>G1C 7B7                                                                                                                  | Internet<br>www.labmat.com         | Phone number<br>418-660-8666 / 800-890-8666 |                       |
| Emergency phone                                                                                                                         | CANUTEC: 613-996-6666              | CENTRE ANTI-POISON DU QUÉBEC 800-463-5060   |                       |
| Date SDS<br>10/21/2019                                                                                                                  | SDS Prepared by<br>Laboratoire MAT | E-Mail<br>labmat@labmat.com                 |                       |

### SECTION 02 - HAZARDS IDENTIFICATION

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Classification WHIMS / GHS                                                          | Flammable liquids category 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| Signal Word                                                                         | DANGER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
| Hazards statements (H)                                                              | H225 Highly flammable liquid and vapour.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
| Precautionary statements (P)                                                        | <p>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical/ventilating/lighting equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P370 + P378 In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide for extinction.</p> <p>P403 + P235 Store in a well-ventilated place. Keep cool.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p> |  |  |
| PICTOGRAMS                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |
| Other dangers                                                                       | NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
|  | <p>Health 2</p> <p>Fire 3</p> <p>Reactivity 0</p> <p>Special danger</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

| Ingrédients (Dénomination chimique / synonymes) | Numéro CAS et tout identificateur unique | Concentration (%) |
|-------------------------------------------------|------------------------------------------|-------------------|
| Carbonate de diméthyle                          | 616-38-6                                 | <=100             |

## SECTION 04 - FIRST AID MEASURES

|                                                                        |                                                                                                                                                             |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye contact</b>                                                     | Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.    |
| <b>Skin contact</b>                                                    | Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.                             |
| <b>Inhalation</b>                                                      | Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.                                                       |
| <b>Ingestion</b>                                                       | Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician. |
| <b>Most important symptoms and effects (acute and delayed)</b>         | Ref. section 11.                                                                                                                                            |
| <b>Immediate medical attention and special treatment, if necessary</b> | In case of medical consultation, keep this sheet available.                                                                                                 |
| <b>General advice</b>                                                  | Show this safety data sheet to the doctor in attendance.                                                                                                    |

## SECTION 05 - FIREFIGHTING MEASURES

|                                                                      |                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flammability</b>                                                  | Yes                                                                                                                                                                                                                                                       |
| <b>Ignition conditions</b>                                           | Heat, sparks and open flame.                                                                                                                                                                                                                              |
| <b>Suitable extinguishing media</b>                                  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.                                                                                                                                                                                  |
| <b>Unsuitable extinguishing media</b>                                | Data not available.                                                                                                                                                                                                                                       |
| <b>Hazardous combustion / decomposition products</b>                 | Hazardous decomposition products formed under fire conditions. Carbon oxides.                                                                                                                                                                             |
| <b>Special fire and explosion hazards</b>                            | May react violently with incompatible products (Ref Section 10). Vapors may form explosive mixtures with air. Vapors may rise to the source of ignition and flash back.                                                                                   |
| <b>Special protective equipment and precautions for firefighters</b> | Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus. |

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

|                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods and materials for containment and cleaning up / Personnel precautions, protective equipment</b> | Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not let product enter drains. Discharge into the environment must be avoided. |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 07 - HANDLING AND STORAGE

|                                    |                                                                                                                                                                                                                                             |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conditions for safe storage</b> | Keep container tightly closed in a dry and well-ventilated place. Close all opened containers carefully and store vertically to avoid any flow. Air sensitive.                                                                              |
| <b>Methods of handling</b>         | Avoid contact with the skin, eyes and clothes. Avoid breathing vapors, spray mists or gases. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. |

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

| Components         | CAS-No.  | Control        | Value             | Basis                                                                                                                                   |
|--------------------|----------|----------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| DIMETHYL CARBONATE | 616-38-6 | TLV, TWA, STEL | No data available | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)                                                                     |
|                    |          | TLV, TWA, STEL | No data available | Canada. British Columbia OEL                                                                                                            |
|                    |          | TLV, TWA, STEL | No data available | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |

|                     |                                                                                                                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ventilation         | Use fan.                                                                                                                                                                                       |
| Respiratory         | If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.                                                              |
| Gloves              | Handle with gloves.                                                                                                                                                                            |
| Eyes                | Safety goggles with safety shutters.                                                                                                                                                           |
| Shoes               | Safety shoes.                                                                                                                                                                                  |
| Clothing            | Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                                     |
| Engineering control | Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values. |

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

|                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| Physical state                        | Liquid.                                                 |
| Appearance                            | Incolore.                                               |
| Odour                                 | Caractéristique.                                        |
| Odour threshold                       | Data not available                                      |
| pH                                    | Données non disponibles.                                |
| Melting point / Freezing point        | 2-4°C                                                   |
| Initial boiling point                 | 90°C                                                    |
| Boiling range                         | Data not available                                      |
| Flash point                           | 16°C                                                    |
| Evaporation rate                      | Data not available                                      |
| Flammability                          | Yes                                                     |
| Lower flammable / Explosive limit     | 4.22%                                                   |
| Upper flammable / Explosive limit     | 12.87%                                                  |
| Vapour pressure                       | 18 mmHg à 21.1 °C.                                      |
| Vapour density                        | 3.11 - (Air = 1.0)-                                     |
| Relative density                      | 1.069g/cm <sup>3</sup>                                  |
| Solubility                            | Soluble dans l'eau. Miscible dans l'alcool et l'éther.. |
| Partition coefficient water/n-octanol | log Pow: 0.354 à 20 °C-                                 |
| Auto-ignition temperature             | 458°C                                                   |
| Decomposition temperature             | Data not available                                      |
| Viscosity                             | 0.625 cPs @ 20 °CcSt                                    |

## SECTION 10 - STABILITY AND REACTIVITY

|                                                                                                  |                                                                               |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>Reactivity</b>                                                                                | Non-reactive under normal conditions.                                         |
| <b>Chemical stability</b>                                                                        | Stable under recommended storage conditions.                                  |
| <b>Possibility of hazardous reactions</b>                                                        | Stable under normal conditions. Vapours may form explosive mixture with air.  |
| <b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b> | Heat, flames and sparks. Sensitive to the air.                                |
| <b>Incompatible material</b>                                                                     | Oxydants. Strong acid. Strong bases. Strong oxidizing agents. Reducing agent. |
| <b>Hazardous decomposition products</b>                                                          | Hazardous decomposition products formed under fire conditions. Carbon oxides. |

## SECTION 11 - TOXICOLOGICAL INFORMATION

### DIMETHYL CARBONATE

|                                                  |                                                                                                                         |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Routes of exposure</b>                        | Ingestion, inhalation, skin and eyes.                                                                                   |
| <b>Acute exposition effects / symptoms:</b>      | By exposure route below.                                                                                                |
| <b>- Eyes</b>                                    | Irritation.                                                                                                             |
| <b>- Skin</b>                                    | Irritation.                                                                                                             |
| <b>- Inhalation</b>                              | Irritation of the mucous membranes and respiratory tract.                                                               |
| <b>Acute toxicity (Ingestion)</b>                | To our knowledge, the product has not been fully studied.                                                               |
| <b>Chronic exposure effects / symptoms</b>       | Inhalation of high vapor concentrations may cause symptoms such as headache, dizziness, tiredness, nausea and vomiting. |
| <b>DL50 (specify species and route of entry)</b> | LD50 Oral - Rat - Male et female - > 5000 mg/kg LD50 Dermal - Rabbit - Male et female - >2000 mg/kg                     |
| <b>CL50 (specify species and route of entry)</b> | CL50 inhalation - Rat Male et female - > 5.36 mg/L- 4 h.                                                                |

## SECTION 12 - ECOLOGICAL INFORMATION

|                                      |                                                                                                                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>                   | EC50 - Daphnia magna (Water flea) - Static test: >100 mg/L - 48 h. EC50 - Pseudokirchneriella subcapitata - >100 mg/L - 72h (static test). LC50 - Danio rerio (zebra fish) - Flow-through test - >100 mg/l - 96 h. |
| <b>Persistence and degradability</b> | Aerobic Biodegradability - Duration of exposure 28 d Result: 86% - Readily biodegradable. (OECD Test Guideline 301 C).                                                                                             |
| <b>Bioaccumulative potential</b>     | Data not available.                                                                                                                                                                                                |
| <b>Mobility in soil</b>              | Probable mobility in the environment due to its solubility in water.                                                                                                                                               |
| <b>Other adverse effects</b>         | Do not flush into surface water or sanitary sewer system.                                                                                                                                                          |

## SECTION 13 - DISPOSAL CONSIDERATIONS

|                               |                                                                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste Disposal Method</b>  | Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company. |
| <b>Contaminated Packaging</b> | Dispose of as unused product.                                                                                                                                |

## SECTION 14 - TRANSPORT INFORMATION

|                                   |                      |
|-----------------------------------|----------------------|
| <b>UN Number</b>                  | 1161                 |
| <b>UN Proper shipping name</b>    | CARBONATE DE MÉTHYLE |
| <b>Transport hazard class(es)</b> | 3 Flammable liquids  |
| <b>Packing group</b>              | II                   |
| <b>Limited quantity index</b>     | 0,1L                 |
| <b>ERAP Index</b>                 | -                    |
| <b>Special precautions</b>        | -                    |

## SECTION 15 - REGULATORY INFORMATION

|              |                              |
|--------------|------------------------------|
| WHIMS CANADA | Flammable liquids category 2 |
|--------------|------------------------------|

## SECTION 16 - OTHER INFORMATION

### Further information

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. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

**Last Update: 10/21/2019**