

## **Material Safety Data Sheet**

## EMERGENCY NUMBERS:

(USA) CHEMTREC : 1(800) 424-9300 (24hrs) (CAN) CANUTEC : 1(613) 996-6666 (24hrs) (USA) Anachemia : 1(518) 297-4444 (CAN) Anachemia : 1(514) 489-5711

| WHMIS                                | Protective Clothing | TDG Road/Rail                            |
|--------------------------------------|---------------------|--|
| Not controlled under WHMIS (Canada). |                     | Not controlled under TDG (Canada).       |
|                                      |                     | PIN: Not applicable. PG: Not applicable. |
|                                      |                     |  |

| Section I. Product Identification and Uses |  |                |                 |
|--|--|----------------|-----------------|
| Product name                               | METHYL ORANGE, 0.1% AQUEOUS SOLUTION                                   | CI#            | Not available.  |
| Chemical formula                           | Not applicable.  | CAS#           | Not applicable. |
| Synonyms                                   | R-3380, 59673  | Code           | R-3380          |
|  |  | Formula weight | Not applicable. |
| Supplier                                   | Anachemia Canada.<br>255 Norman.<br>Lachine (Montreal), Que<br>H8R 1A3 | Supersedes     |                 |
| Material uses                              | For laboratory use only.   |                |                 |

| Section II. Ingredients      |                       |                |  |
|------------------------------|-----------------------|----------------|--|
| Name                         | CAS #                 | %              | TLV  |
| 1) METHYL ORANGE<br>2) WATER | 547-58-0<br>7732-18-5 | 0.1<br>Balance | Not established by ACGIH<br>Not established by ACGIH |
|                              |                       |                |  |

Toxicity values of the hazardous ingredients

METHYL ORANGE A.C.S: ORAL (LD50): Acute: 60 mg/kg (Rat). INTRAPERITONEAL (LD50): Acute: 101 mg/kg (Mouse).

| Section III. Phy                     | sical Data               | METHYL ORANGE, 0.1% AQUEOUS SOLUTION page | 2/4 |
|--------------------------------------|--------------------------|---|-----|
| Physical state and appearance / Odor | Odorless, orange liquid. |   |     |
| pH (1% soln/water)                   | Not available.           |   |     |
| Odor threshold                       | Not available.           |   |     |
| Percent volatile                     | >99% (V/V)               |   |     |
| Freezing point                       | Not available.           |   |     |
| Boiling point                        | Not available.           |   |     |
| Specific gravity                     | Not available.           |   |     |
| Vapor density                        | Not available.           |   |     |
| Vapor pressure                       | Not available.           |   |     |
| Water/oil dist. coeff.               | Not available.           |   |     |
| Evaporation rate                     | Not available.           |   |     |
| Solubility                           | Miscible in water.       |   |     |

## Section IV. Fire and Explosion Data

| Flash point                   | Not applicable.  |  |  |
|-------------------------------|--|--|--|
| Flammable limits              | Not available.   |  |  |
| Auto-ignition temperatu       | re Not available.  |  |  |
| Fire degradation<br>products  | Oxides of carbon, nitrogen, sodium, and sulfur.  |  |  |
| Fire extinguishing procedures | Use extinguishing media suitable for surrounding materials. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. |  |  |
| Fire and Explosion<br>Hazards | The sensitivity to static discharge is not available. The sensitivity to impact is not available. Emits toxic fumes under fire conditions.   |  |  |
|                               |  |  |  |

## Section V. Toxicological Properties

| Routes of entry              | Inhalation and ingestion.  |
|------------------------------|--|
| Effects of Acute<br>Exposure | May be harmful if swallowed, inhaled, or absorbed through skin.          |
| Eye                          | May cause irritation. May stain skin and eyes.                           |
| Skin                         | May cause irritation. May stain. May be absorbed through the skin.       |
| Inhalation                   | May be harmful if inhaled.   |
| Ingestion                    | May be harmful if swallowed. Ingestion of large amounts may cause death. |

| Section V.                         | Toxicological Properties   | METHYL ORANGE, 0.1% AQUEOUS SOLUTION             | page 3/4       |
|------------------------------------|--|--|----------------|
| Effects of Chronic<br>Overexposure |  |  |                |
|                                    |  |  |                |
|                                    |  |  |                |
|                                    | First Aid Measures   |  |                |
| Eye contact                        | Immediately flush eyes with copious quantities of water for at le<br>the entire surface. Call a physician.                       | east 15 minutes holding lids apart to ensu       | re flushing of |
| Skin contact                       | Immediately flush skin with plenty of water and soap for at lea<br>and shoes. Call a physician. Wash contaminated clothing befor |  | ated clothing  |
| Inhalation                         | Remove patient to fresh air. Administer approved oxygen supp<br>or CPR if breathing has ceased. Call a physician.                | y if breathing is difficult. Administer artifici | al respiration |
|                                    |  |  |                |
| Ingestion                          | If conscious, wash out mouth with water. Have conscious per vomiting. Seek immediate medical attention. Never give anyth         |  |                |
|                                    |  |  |                |
| Section V                          | II. Reactivity Data  |  |                |
| Stability                          | Stable. Conditions to avoid: High temperatures, spart contamination.   | s, open flames and all other sources             | of ignition,   |
| Hazardous decom<br>products        | p. Not available.  |  |                |
| Incompatibility                    | Oxidizing agents. Water may react with water reactive mater  | ials (sodium, potassium, etc).                   |                |
| Reaction Products                  | s Not available. Hazardous polymerization will not occur.  |  |                |
|                                    |  |  |                |

| Section VIII. F                                  | Preventive Measures   | METHYL ORANGE, 0.1% AQUEOUS SOLUTION page   | : 4/4                             |
|--|---|---|-----------------------------------|
| Protective Clothing in<br>case of spill and leak | Wear self-contained breathing apparatus, rul  | ber boots and heavy rubber gloves.  |                                   |
| Spill and leak                                   |   | miculite and place in a closed container for disposal. Ventilate area a plete. DO NOT empty into drains. DO NOT touch damaged containe  |                                   |
| Waste disposal                                   |   | v be harmful to aquatic life. Can be dangerous if allowed to enter drink<br>c or irrigation water supplies, lakes, streams, ponds, or rivers.   | ding                              |
| Storage and Handling                             | incompatible materials. Do not add any othe<br>gas/fumes/vapor/spray. In case of insufficient<br>closed and dry. Manipulate under an adec<br>Handle and open container with care. Ta<br>manipulated by qualified personnel. Do not g          | as, sparks, and flame. Store in a well ventilated area. Store away fr<br>r material to the container. Do not wash down the drain. Do not brea<br>it ventilation, wear suitable respiratory equipment. Keep container tig<br>uate fume hood. Empty containers may contain a hazardous resid<br>ke off immediately all contaminated clothing. This product must<br>et in eyes, on skin, or on clothing. Wash well after use. In accordance v<br>allow smoking and food consumption while handling. In case of accid<br>nediately (show the label when possible.). | the<br>htly<br>lue.<br>be<br>with |
| Section IX. P                                    | rotective Measures  |   |                                   |
| Protective clothing                              | Splash goggles. Impervious rubber gloves, co<br>OSHA/MSHA jointly approved respirator is advis  | veralls, and/or other resistant protective clothing. Sufficient to protect skin.<br>ed in the absence of proper environmental controls. For emergency situations<br>I-approved). Do not wear contact lenses. Make eye bath and emergency show<br>shower is proximal to the work-station location.   | s, a                              |
| Engineering controls                             | Use in a chemical fume hood. Do not use ir  |   | _                                 |
| Section X. Or                                    | ther Information  |   |                                   |
| Special Precautions or<br>comments               | Harmful liquid! Do not breathe vapor. Avoid<br>or repeated exposure. Use in a chemical fur<br>chemical, physical and toxicity of this substa<br>open container with care. Container should<br>person.<br>RTECS NO: DB6327000 (Methyl orange). | ne hood. To the best of our knowledge, the normal sector has not been fully investigated. Handle and  |                                   |
|  |   | NFPA  |                                   |
|  |   |   |                                   |
| Prepared by MSDS D                               | epartment/Département de F.S  | Validated 07-Jan-2013   |                                   |
| _  | (514) 489-5711  |   |                                   |
|  |   | s of the date hereof, the company makes no warranty with respect there<br>are offered solely for your consideration, investigation and verification.  | eto                               |