

# Safety Data Sheet

according to OSHA Hazard Communication  
29 CFR Part 1910.1200



## SECTION 1. Identification

**Product Code** 99078MEKT000810  
**Product Name:** Methyl Ethyl Ketone  
  
**Supplied by:** RelaDyne  
9395 Kenwood Rd, Suite 104  
Blue Ash, OH 45242  
88-830-3156  
www.reladyne.com

**24 Hour Emergency:**  
**INFOTRAC: 1-800-535-5053**

NOTE: INFOTRAC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

## SECTION 2. Hazard(s) Identification

\*\*\* EMERGENCY OVERVIEW \*\*\*: Flammable liquid and vapor. Causes serious eye irritation.

### GHS Classification

Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 NE

### Symbol(s) of Product



### Signal Word

Danger

### GHS HAZARD STATEMENTS

|                                       |      |                                    |
|---------------------------------------|------|------------------------------------|
| Eye Irritation, category 2            | H319 | Causes serious eye irritation.     |
| Flammable Liquid, category 2          | H225 | Highly flammable liquid and vapor. |
| STOT, single exposure, category 3, NE | H336 | May cause drowsiness or dizziness. |

### GHS PRECAUTIONARY STATEMENTS

|                |  |
|----------------|--|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P240           | Ground/bond container and receiving equipment.   |
| P241           | Use explosion-proof electrical/ventilating/lighting/equipment.   |
| P242           | Use only non-sparking tools.   |
| P243           | Take precautionary measures against static discharge.  |
| P261           | Avoid breathing dust/fume/gas/mist/vapors/spray.   |
| P264           | Wash thoroughly after handling.  |
| P271           | Use only outdoors or in a well-ventilated area.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.                              |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312           | Call a POISON CENTER/doctor/physician if you feel unwell.  |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |

P370+P378  
 P403+P233  
 P403+P235  
 P405  
 P501

In case of fire: Use appropriate method to extinguish.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

### SECTION 3. Composition/Information on Ingredients

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt. %</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|----------------------|----------------|--------------|--------------------|-----------------------|
| 2-butanone           | 78-93-3        | 75-100       | GHS02-GHS07        | H225-319-336          |

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

### SECTION 4. First-Aid Measures



**FIRST AID - EYE CONTACT:** Remove contact lenses if worn. Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

**FIRST AID - SKIN CONTACT:** Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

**FIRST AID - INHALATION:** To prevent aspiration, keep head below knees.

**FIRST AID - INGESTION:** DO NOT induce vomiting. Get medical attention immediately.

### SECTION 5. Fire-Fighting Measures

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Vapors/dust may form explosive mixture with air. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning.

**SPECIAL FIREFIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Use water with caution. Material will float and may ignite on surface of water. Water may be ineffective in fighting the fire. Water spray to cool containers or protect personnel. Use with caution. Avoid use of solid water streams. Small fires: carbon dioxide or dry chemical. Large fire: alcohol-type aqueous film-forming foam or water spray. Evacuate all unnecessary personnel. Shut down motors, pumps, electrical service and eliminate all sources of ignition.

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam, Water Fog

### SECTION 6. Accidental Release Measures

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) A vapor suppressing foam may be used to reduce vapors.

### SECTION 7. Handling and Storage



**HANDLING:** Use only in a well ventilated area. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor, fumes or mist. Take precautionary measures against static discharge.

**STORAGE:** Keep away from heat, sparks, and flame. Keep container closed when not in use. Protect from direct sunlight. Store containers in a cool, well ventilated place.

## SECTION 8. Exposure Controls/Personal Protection

### Ingredients with Occupational Exposure Limits

| <u>Chemical Name</u> | <u>ACGIH TLV-TWA</u> | <u>ACGIH-TLV STEL</u> | <u>OSHA PEL-TWA</u> | <u>OSHA PEL-CEILING</u> |
|----------------------|----------------------|-----------------------|---------------------|-------------------------|
| 2-butanone           | 200 ppm              | 300 ppm               | 200 ppm             | N.D.                    |

### Personal Protection



**RESPIRATORY PROTECTION:** NIOSH/MSHA approved respirators may be necessary if airborne concentrations are expected to exceed exposure limits.



**SKIN PROTECTION:** Wear impervious gloves to prevent contact with the skin. Wear protective gear as needed - apron, suit, boots.



**EYE PROTECTION:** Wear safety glasses with side shields (or goggles) and a face shield.



**OTHER PROTECTIVE EQUIPMENT:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



**HYGIENIC PRACTICES:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Avoid breathing vapors. Do not eat, drink, or smoke in areas where this material is used.

## SECTION 9. Physical and Chemical Properties

|                                   |                           |                                 |                |
|-----------------------------------|---------------------------|---------------------------------|----------------|
| <b>Appearance:</b>                | Clear, transparent liquid | <b>Physical State:</b>          | Liquid         |
| <b>Odor:</b>                      | Typical                   | <b>Odor Threshold:</b>          | N.D.           |
| <b>Density, g/cm<sup>3</sup>:</b> | 0.810                     | <b>pH:</b>                      | N.D.           |
| <b>Freeze Point, °F:</b>          | N.D.                      | <b>Viscosity:</b>               | N.D.           |
| <b>Solubility in Water:</b>       | Appreciable               | <b>Explosive Limits, vol%:</b>  | 1.8 - 11.5     |
| <b>Boiling Range, °F:</b>         | 173 - 178                 | <b>Flash Point, °F:</b>         | 21             |
| <b>Evaporation Rate:</b>          | N.D.                      | <b>Auto-ignition Temp., °F:</b> | N.D.           |
| <b>Vapor Density:</b>             | Heavier than air          | <b>Vapor Pressure:</b>          | 78 mm Hg @ 20C |

(See "Other information" Section for abbreviation legend)

## SECTION 10. Stability and Reactivity

**STABILITY:** No Information

**CONDITIONS TO AVOID:** Avoid impact, friction, heat, sparks, flame and source of ignition.

**INCOMPATIBILITY:** Keep away from acids. Prevent contact with strong oxidizing agents. Avoid contact with alkalines.

**HAZARDOUS DECOMPOSITION PRODUCTS:** During combustion carbon monoxide may be formed. During combustion carbon dioxide may be formed.

**HAZARDOUS POLYMERIZATION:** No Information

## SECTION 11. Toxicological Information



### Information on Toxicological Effects

**EFFECTS OF OVEREXPOSURE - INHALATION:** May cause central nervous system depression. Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Can be absorbed through skin and produce central nervous system effects.

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes serious irritation to eyes.

**EFFECTS OF OVEREXPOSURE - INGESTION:** May cause central nervous system depression.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes. Possible brain damage from overexposure. May cause target organ damage. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

**Primary Route(s) of Entry:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

#### Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Name according to EEC</u> | <u>Oral LD50, mg/kg</u> | <u>Dermal LD50, mg/kg</u> | <u>Vapor LC50, mg/L</u> |
|----------------|------------------------------|-------------------------|---------------------------|-------------------------|
| 78-93-3        | 2-butanone                   | >2193                   | >5000                     | 38,000                  |

## SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information

## SECTION 13. Disposal Considerations



For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

**DISPOSAL METHOD:** Dispose of waste in accordance with all local, state and federal regulations.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) A vapor suppressing foam may be used to reduce vapors.

## SECTION 14. Transport Information

|                                  |                     |                          |                |
|----------------------------------|---------------------|--------------------------|----------------|
| <b>DOT Proper Shipping Name:</b> | Methyl ethyl ketone | <b>Packing Group:</b>    | II             |
| <b>DOT Hazard Class:</b>         | 3                   | <b>Hazard SubClass:</b>  | No Information |
| <b>DOT UN/NA Number:</b>         | UN1193              | <b>Resp. Guide Page:</b> | 127            |

## SECTION 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard

**SARA SECTION 313:**

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

**TOXIC SUBSTANCES CONTROL ACT:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

**U.S. State Regulations:****NEW JERSEY RIGHT-TO-KNOW:**

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

**PENNSYLVANIA RIGHT-TO-KNOW**

The following non-hazardous ingredients are present in the product are at or greater than 3%.

No PA Right-To-Know components exist in this product.

**CALIFORNIA PROPOSITION 65 CARCINOGENS**

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

**CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS**

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

**International Regulations: As follows -****CANADIAN WHMIS:**

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

**WHMIS Class:** No Information

**SECTION 16. Other Information**

**Revision Date:** 2/18/2016 **Supersedes Date:** 12/22/2014

**Datasheet produced by:** EH&S - Regulatory Department

**HMIS Ratings:**

|                |   |                      |   |                    |   |                             |   |
|----------------|---|----------------------|---|--------------------|---|-----------------------------|---|
| <b>Health:</b> | 1 | <b>Flammability:</b> | 3 | <b>Reactivity:</b> | 0 | <b>Personal Protection:</b> | X |
|----------------|---|----------------------|---|--------------------|---|-----------------------------|---|

**Volatile Organic Compounds, gr/ltr:** 100

This Safety Data Sheet is prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. The information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225 Highly flammable liquid and vapor.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.

**Icons for GHS Pictograms shown in Section 3 describing each ingredient:**

GHS02



GHS07



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS may not be applicable. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.