**MATERIAL SAFETY DATA SHEET** WDR Scientific® *(REV: 2011)*

**1. Identification of the Substance/Preparation and of the Company/Undertaking.**

- Product Type: Dental Lubricant and Model Separator / Laboratory
- Trade Name: **MICRON ™ Die Lube**
  **Model Separator**
- Company: **WDR Scientific, LLC**
  **PO Box 5145**
  **Central Point Oregon 97502**
  **TEL: 800-653-0683 FAX: 541-647-6576**

**2. Composition/Information on Ingredients.**

| *Substance* | *Concentration, %* |
|---|---|
| Isopropyl Alcohol (IPA) | 65 - 95% |
| Lubricant | 5 - 25% |
| Glycerine | 0 - 2% |

**3. Hazard Identification.**

- Contains Isopropyl Alcohol: flammable liquid UN1219
- Flammability limits: LEL=2 UEL=12
- Do not drink liquid. Prevent over exposure to vapor.
- Note: Over exposure to vapor is unlikely in the small quantities recomme nded for use.

**4. First-Aid Measures.**

- If on skin: Thoroughly wash exposed area with soap and water. Remove contaminated clothing and launder before re-use.
- If in eyes: Flush eyes with water for 15 minutes, lifting upper and lower lids occasionally; get medical attention.
- If swallowed: Immediately drink two glasses of water and induce vomiting by either giving ipecac syrup or by placing finger at back of throat, never give anything by mouth to an unconscious person. Get medical attention immediately.
- If breathed: If affected by vapors, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

**5. Fire-Fighting Measures.**

- Use water fog, alcohol foaming,$CO_2$ or dry chemical.

**6. Accidental Release Measures.**

- Remove all sources of spark or flame. Note: Vapor may travel or be moved by air currents to ignition source locations distant from the spill.
- Absorb and dispose of liquid. Use soap and water to clean contact surface.
- Contaminated absorbent may be deposited in a landfill in accordance with local, state and federal regulations.

**7. Handling and Storage.**

- Warning! Flammable
- Store in a cool dry area in tightly sealed containers.
- Keep container closed when not in use. Vapors may cause irritation.

**8. Exposure Controls/Personal Protection.**

- Use in a well ventilated environment.
- Exposure Limits

| Exposure Limits | OSHA-PEL | ACGIH-TLV |
|---|---|---|
| Isopropyl Alcohol | 400 ppm | 400 ppm |
| Glycerine | 10 mg/m$^3$ | 10 mg/m$^3$ |

- Mixture: TLV for mixture is not established. WDR Scientific, LLC recommends 400 pp m (as IPA) as indicator of exposure.

Special protection information: Respiratory protection - If workplace exposure limit(s) of product or any component is exceeded a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

**9. Physical and Chemical Properties.**

- Multicolored clear liquid with characteristic alcohol odor

| | |
|---|---|
| Specific gravity ($H_2O$=1): | 0.75 - 0.85 |
| Solubility in water: | Not complete |
| Vapor pressure (mm Hg): | Approximately 33mm at 20°C |
| Boiling point (°C): | 82°C |
| Vapor density (air-1): | Approximately 2 |
| Evaporation rate (Butyl alcohol=-1): | 2.3 |
| Flash point (Pensky-Martens closed cup) | 7°C |

**10. Stability and Reactivity.**

- Stable material.
- Conditions to avoid: Contact with strong oxidizing agents.
- Hazardous decomposition: Not known to occur.

**11. Toxicological Information.**

- Large doses (>800 mg/kg/day) of IPA given orally to pregnant rats during the critical period of gestation produced slight decreases in fetal weight. Oral doses as high as 480 mg/kg/day of IPA caused evidence of toxicity in pregnant rabbits, but did not produce evidence of embryo or fetal toxici ty.
- In an acute vapor inhalation study, high concentrations of IPA (1500 ppm and greater) caused a spectrum of transient effects indicative of narcosis.

**12. Ecological Data.**

- Avoid contamination of water ways. Contact local authorities if significant contamination occurs.

**13. Disposal Considerations.**

- No special treatment required for small volumes of liquid.

**14. Transport Information.**

- ORM-D Class 3, regulated status - flammable liquid

**15. Regulatory Information.**

- California proposition 65: This product (IPA) contains no substances known to cause cancer, birth defects or other reproductive harm.
- EPA hazard categories (IPA): Immediate health, delayed health, and fire

**16. Other Information.**

- HMIS Rating: Health=1 Flammability=3 Reactivity=0
  Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum
- Special precautions: Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. The information accumulated herein is believed to be accurate, but is no t warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of nee d that the information is current, applicable, and suitable to their circumstances.

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| Prepared By: N.M. Dean QA | Translated By: |
| Date: July 21, 2011 | Date: |