

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name and Use:** FORMALL 2281 - Metal Forming Lubricant

**Manufacturer:** Lamson Oil Company  
5060 27<sup>th</sup> Avenue, Rockford, Illinois 61109 USA

**Telephone Number:** (815) 226-8090

**Emergency Number:** Call (Infotrac) (800) 535-5053

Please call INFOTRAC in the event of a transportation or medical emergency involving a human or an animal.

## 2. HAZARD IDENTIFICATION



**Signal Word:** Warning

### **Physical and Health Hazards:**

Skin Irritation: Category 2

Eye Irritation: Category 2

### **Hazard Statements:**

Causes skin irritation.

Causes serious eye irritation.

### **Precautionary Statements:**

Wear protective gloves and eye protection. Wash hands thoroughly after handling.

IF SWALLOWED: Immediately call a Poison Center or Physician. Do not induce vomiting.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

If skin irritation occurs, get medical attention.

Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists, get medical attention.

In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) for extinction.

Store in a well ventilated place. Keep cool.

Avoid release to the environment. Collect spillage.

Dispose of contents and container in accordance with local regulations.

**3. COMPONENTS**

**Substantial Ingredients**

	<b>CAS #</b>	<b>Weight %</b>	<b>GHS Classification</b>
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	> 40%	Eye Ir 2, Skin Ir 2
Emulsifier Base	Mixture	> 10%	Eye Ir 2, Skin Ir 2
Polyphosphoric polymers	68514-88-5	> 10%	None
Triethanolamine	102-71-6	> 10%	None
Nitrobutyl Morpholine	2224-44-4	< 2%	Act Tox 4, Skin Ir 2 Eye Cor 1 Skin Sen 1

**4. FIRST AID MEASURES**

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. If eye irritation persists, get medical attention.

**IF ON SKIN (or hair):** Remove immediately all contaminated clothing. Rinse skin with water.

If skin irritation occurs, get medical attention.

**IF SWALLOWED:** Immediately call a Poison Center or Physician. Do not induce vomiting.

**IF INHALED:** Remove to fresh air; apply artificial respiration if necessary. Get medical attention.

**5. FIRE-FIGHTING MEASURES**

**General Hazard**

Petroleum products can form combustible mixtures at temperatures at or above the flash point.

**Fire-Fighting**

Keep fire exposed containers cool with water spray. Separate unburning product from fire. Use carbon dioxide, foam, or dry chemical extinguishing media to put out fires.

**Unusual Decomposition Products Under Fire Conditions**

None

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**

Remove contaminated clothing, including shoes and wash thoroughly after contact.

Laundry contaminated clothing before reuse.

**Environmental Precautions**

Stop leak if without risk.

Dike large spills to prevent ingress into sewers or waterways.

Eliminate all sources of ignition.

Ensure adequate ventilation.

Clean spills with absorbent and store in marked containers for disposal.

Dispose in accordance with all applicable regulations.

**7. HANDLING AND STORAGE****Safe Handling and Storage**

Do not handle, store, or dispense near open flames or ignition sources.  
Keep containers inside and out of direct sunlight. Avoid extreme temperatures.  
Do not reuse containers.

**Incompatible Products**

Avoid strong oxidizing and reducing agents.

**8. EXPOSURE CONTROL AND PERSONAL PROTECTION****Ventilation**

Local exhaust is usually sufficient. General exhaust is preferred.

**Personal Protection**

Use approved respirator when airborne exposure limits are exceeded. Use petroleum resistant gloves to avoid prolonged contact. Wear goggles or safety glasses with splashguards.

**Work Place Exposure Guide Lines**

Petroleum Oil mist has a TLV limit of 5 mg/m<sup>3</sup>.  
Triethanolamine has a recommended TLV of 5 mg/m<sup>3</sup>.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	> 500 °F
<b>Specific Gravity (water =1):</b>	0.96
<b>Vapor pressure (mm Hg):</b>	< 1
<b>Melting Point:</b>	Not Applicable
<b>Vapor Density (Air =1):</b>	> 5
<b>Evaporation Rate (butyl Acetate=1):</b>	< 0.1
<b>Solubility in water:</b>	Emulsifies
<b>Reactivity in water:</b>	NIL
<b>Appearance and Odor:</b>	Clear, brown liquid; mild odor
<b>Flash point:</b>	>330 °F
<b>Flammable Limits (volume percent in air):</b>	LEL: Not Established UEL: Not Established
<b>Autoignition Temperature: approximately</b>	Not Established

**10. STABILITY AND REACTIVITY**

**Stability:** [ ] Unstable [X] Stable

**Conditions to avoid:** None

**Incompatibility (Materials to avoid):** Strong oxidizing and reducing agents.

**Hazardous Decomposition Products:** Combustion may produce oxides of carbon.

**Hazardous Polymerization:** [ ] May Occur [X] Will Not Occur

**Conditions to Avoid:** Not Applicable

**11. TOXICOLOGICAL INFORMATION**

This product has minimal toxicity when inhaled, ingested, or when skin or eye contact is made.

This product is not expected to cause cancer.

No data is available to indicate that any ingredient is mutagenic or genotoxic.

This product is not expected to cause reproductive or developmental effects.

Nitrobutyl Morpholine in its pure form is a known skin sensitizer; but because of the low amount contained, this product is not expected to cause skin sensitization.

Contact with eyes will result in irritation.

Prolonged exposure to the skin could result in irritation or dermatitis.

Exposure to vapor or aerosol concentrations above the recommended exposure level is irritating to the eyes and respiratory tract, and may cause headaches or dizziness.

**12. ECOLOGICAL INFORMATION**

This product is detrimental to the environment. .

This product is toxic to aquatic life with lasting effects.

This product contains a Volatile Organic Compound: So part of it will slowly evaporate upon release.

Please refer to Section 6 for accidental release information.

**13. DISPOSAL CONSIDERATIONS**

This product is not suitable for disposal by either landfill or municipal sewers, natural streams or rivers.

This product can be incinerated directly in appropriate equipment.

**14. TRANSPORT INFORMATION**

For containers of 119 gals or less the DOT does not regulate this product for Air or Ground shipments.

**15. REGULATORY INFORMATION**

All components of this product are on the U.S. EPA TSCA Inventory List.

This product does not contain a reportable chemical under SARA section 313.

**16. OTHER INFORMATION**

This document was revised 13 May 2015