



Revision Number: 008.0

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**1. IDENTIFICATION**

**Product name:** BONDERITE M-MN LUBRITE 2  
**MANGANESE PHOSPHATE known as PARCO LUBRITE 2**  
**IDH number:** 593831

**Product type/ Recommended use:** Phosphating Products for Metals  
**Item number:** 593831

**Restriction of Use:** None identified  
**Region:** United States

**Company address:** Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067  
**Contact information:**  
 Telephone: +1 (860) 571-5100  
 MEDICAL EMERGENCY Phone: Poison Control Center  
 1-877-671-4608 (toll free) or 1-303-592-1711  
 TRANSPORT EMERGENCY Phone: CHEMTREC  
 1-800-424-9300 (toll free) or 1-703-527-3887  
 MEDICAL EMERGENCY Phone: Poison Control Center  
 1-877-671-4608 (toll free) or 1-303-592-1711  
 TRANSPORT EMERGENCY Phone: CHEMTREC  
 1-800-424-9300 (toll free) or 1-703-527-3887  
 Internet: www.henkelna.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** H290 - MAY BE CORROSIVE TO METALS.  
 H314 - CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
 H317 - MAY CAUSE AN ALLERGIC SKIN REACTION.  
 H334 - MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.  
 H350 - MAY CAUSE CANCER.  
 H360 - MAY DAMAGE FERTILITY OR THE UNBORN CHILD.  
 H372 - CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
CORROSIVE TO METALS	1
SKIN CORROSION	1
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
CARCINOGENICITY	1A
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P234 - Keep only in original packaging.  
 P260 - Do not breathe vapors, mist, or spray.  
 P264 - Wash affected area thoroughly after handling.

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**Response:** P270 - Do not eat, drink or smoke when using this product.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear protective gloves, clothing, eye and face protection.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing.  
P304+P340+P310 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - IF exposed or concerned: Get medical attention.  
P333+P313 - If skin irritation or rash occurs: Get medical attention.  
P342+P311 - If experiencing respiratory symptoms: Call a poison center or physician.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P390 - Absorb spillage to prevent material damage.  
P405 - Store locked up.  
**Storage:**  
**Disposal:** P501 - Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

**Other hazards** Not available.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Weight %*
Manganese dihydrogen phosphate	18718-07-5	10 - 30
Phosphoric acid	7664-38-2	5 - 10
Manganese nitrate	10377-66-9	1 - 5
Nickel nitrate	13138-45-9	0.1 - 1

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

#### First Aid Measures by likely routes of exposure

**Inhalation:** If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

**Skin contact:** Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention.

**Eye contact:** In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:** Get immediate medical attention. Do not induce vomiting.

**Most important symptoms and effects (acute and delayed):** The most important known symptoms and effects, both acute and delayed, are described in Section 11: Toxicological Information.

**Indication of any immediate medical attention / special treatment needed:** Treat symptomatically and supportively.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Use media appropriate for surrounding material.

**Improper extinguishing agents:** Not available.

**Special firefighting procedures:** Wear full protective clothing. Wear self-contained breathing apparatus.

**Unusual fire or explosion hazards:** This product is an aqueous mixture which will not burn.

**Hazardous combustion products:**

Irritating and toxic gases or fumes may be released during a fire.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.

**Clean-up methods:**

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

**Handling:**

Avoid contact with eyes, skin and clothing. Do not take internally. Wash thoroughly after handling. Avoid breathing mists or aerosols of this product. For industrial use only. Do not mix this product with material which contain AMINES. NITROSAMINE may be formed.

**Storage:**

For safe storage, store at or above 40 °F (4.4 °C) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Thaw and mix thoroughly if frozen.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Manganese dihydrogen phosphate	0.02 mg/m <sup>3</sup> TWA (as Mn) Respirable fraction. 0.1 mg/m <sup>3</sup> TWA (as Mn) Inhalable fraction.	5 mg/m <sup>3</sup> Ceiling (as Mn)	None	None
Phosphoric acid	3 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> PEL	None	None
Manganese nitrate	0.02 mg/m <sup>3</sup> TWA (as Mn) Respirable fraction. 0.1 mg/m <sup>3</sup> TWA (as Mn) Inhalable fraction.	5 mg/m <sup>3</sup> Ceiling (as Mn)	None	None
Nickel nitrate	0.1 mg/m <sup>3</sup> TWA (as Ni) Inhalable fraction.	1 mg/m <sup>3</sup> PEL (as Ni)	None	None

**Engineering controls:**

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:**

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1901.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit-testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented. If concentrations are below the TLV and/or PEL, a NIOSH approved disposable dust/mist respirator may be used for personal comfort. For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-face piece respirator equipped with dust-mist cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in Publication No.87-116 or ANSI Z88.2-1992. Note: ANSI Z88.2-1992 requires the use of a HEPA filter if the particle size distribution of the contaminant is unknown. WARNING! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Eye/face protection:**

Wear chemical goggles; face shield (if splashing is possible).

**Skin protection:**

Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended. Gloves should be tested to determine suitability for prolonged contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Green
<b>Odor:</b>	Bland
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	< 1.0
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	> 210 °F (> 98.9 °C)calculated
<b>Melting point/ range:</b>	Not determined
<b>Density/Relative density:</b>	1.29 - 1.37 at 15.6 °C (60.08 °F)
<b>Relative vapor density:</b>	Not determined
<b>Flash point:</b>	160 °C (320°F) HST-US 027F
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	Not applicable
<b>Evaporation rate:</b>	Not applicable
<b>Solubility:</b>	Complete Water
<b>Partition coefficient n-octanol/water (logarithmic value):</b>	Not determined
<b>VOC content:</b>	Not applicable
<b>Dynamic viscosity:</b>	Not available.
<b>Kinematic viscosity:</b>	Not available.
<b>Particle characteristics:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Decomposes with heat to produce oxides of nitrogen.
<b>Incompatible materials:</b>	This product may react with strong alkalis.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	None expected.

## 11. TOXICOLOGICAL INFORMATION

**Likely routes of exposure:** Skin, Inhalation, Eyes, Ingestion

**Potential Health Effects/Symptoms**

**Inhalation:** Mists, vapors or liquid may cause severe irritation or burns.  
**Skin contact:** Contact with liquid may produce severe skin irritation including redness, inflammation and chemical burns. Product contains a nickel compound, which may cause an allergic skin sensitization reaction.  
**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.  
**Ingestion:** This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s
Manganese dihydrogen phosphate	None
Phosphoric acid	Oral LD50 (Rat) = 1,530 mg/kg Dermal LD50 (Rabbit) = 2,740 mg/kg
Manganese nitrate	None
Nickel nitrate	None

Hazardous Component(s)	Immediate Health Effects	Delayed Health Effects	Chronic Health Effects
Manganese dihydrogen phosphate	Irritant		Behavioral Blood Developmental Kidney Lung Mutagen Nervous System Reproductive Respiratory
Phosphoric acid	Irritant Corrosive		
Manganese nitrate	Irritant		Behavioral Blood Cardiac Developmental Kidney Liver Lung Mutagen Nervous System Reproductive Respiratory Vascular
Nickel nitrate	Corrosive Irritant	Allergen	Blood Cardiac Central nervous system Developmental Immune system Kidney Liver Lung Mutagen Reproductive Respiratory Sensory Some evidence of carcinogenicity Vascular

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Manganese dihydrogen phosphate	No	No	No
Phosphoric acid	No	No	No
Manganese nitrate	No	No	No
Nickel nitrate	Known To Be Human Carcinogen.	Group 1	No

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

### U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Phosphoric acid solution  
Hazard class or division: 8  
Identification number: UN 1805  
Packing group: III  
DOT Hazardous Substance(s): Nickel nitrate

### International Air Transportation (ICAO/IATA)

Proper shipping name: Phosphoric acid, solution  
Hazard class or division: 8  
Identification number: UN 1805  
Packing group: III

### Water Transportation (IMO/IMDG)

Proper shipping name: PHOSPHORIC ACID SOLUTION  
Hazard class or division: 8  
Identification number: UN 1805  
Packing group: III

## 15. REGULATORY INFORMATION

### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

**TSCA 12 (b) Export Notification:** None above reporting de minimis.

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.

**CERCLA/SARA Section 311/312:** Please refer to the GHS classification in Section 2

**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Nickel nitrate (CAS# 13138-45-9). Manganese nitrate (CAS# 10377-66-9). Manganese dihydrogen phosphate (CAS# 18718-07-5).

**CERCLA Reportable quantity:** Nickel nitrate (CAS# 13138-45-9) 100 lbs. (45.4 kg)

**California Proposition 65:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 02/24/2025

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