



Revision Number: 005.2

Issue date: 04/03/2012

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** BONDERITE M-MN LUBRITE 5  
MANGANESE PHOSPHATE known as  
PARCO LUBRITE 5

**Product type:** Coating

**Company address:**  
Henkel Corporation  
32100 Stephenson Highway  
Madison Heights, MI 48071

**IDH number:** 594401

**Region:** United States

**Contact information:**  
Telephone: 248.583.9300  
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**

<b>Physical state:</b>	Liquid	<b>HMIS:</b>	
<b>Color:</b>	green	<b>HEALTH:</b>	*3
<b>Odor:</b>	Bland	<b>FLAMMABILITY:</b>	0
		<b>PHYSICAL HAZARD:</b>	0
		<b>Personal Protection:</b>	See MSDS Section 8

**DANGER-CORROSIVE!:** CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.  
POSSIBLE CANCER HAZARD.

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects**

**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.

**Existing conditions aggravated by exposure:** Eye, skin and respiratory disorders. Preexisting cardiovascular or bone marrow diseases.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components	CAS NUMBER	%
Phosphoric acid	7664-38-2	10 - 30
Manganese dihydrogen phosphate	18718-07-5	10 - 30
Manganese nitrate	10377-66-9	5 - 10
Iron sulphate	7720-78-7	0.1 - 1
Nickel nitrate	13138-45-9	0.1 - 1

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Extinguishing media:</b>	Use media appropriate for surrounding material.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	This product is an aqueous mixture which will not burn.
<b>Hazardous combustion products:</b>	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.

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.
<b>Clean-up methods:</b>	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

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Do not take internally. Wash thoroughly after handling. Do not breathe gas/fumes/vapor/spray. For industrial use only. Do not mix this product with material which contain AMINES. NITROSAMINE may be formed.
<b>Storage:</b>	Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Manufacturer recommends storing above 4.4 °C (40 °F). 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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Phosphoric acid	1 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup> STEL	1 mg/m <sup>3</sup> TWA	None	None
Manganese dihydrogen phosphate	0.2 mg/m <sup>3</sup> TWA (as Mn)	5 mg/m <sup>3</sup> Ceiling (as Mn)	None	None
Manganese nitrate	0.2 mg/m <sup>3</sup> TWA (as Mn)	5 mg/m <sup>3</sup> Ceiling (as Mn)	None	None
Iron sulphate	1 mg/m <sup>3</sup> TWA (as Fe)	None	None	None
Nickel nitrate	0.1 mg/m <sup>3</sup> TWA (as Ni) Inhalable fraction.	1 mg/m <sup>3</sup> TWA (as Ni)	None	None

<b>Engineering controls:</b>	Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.
<b>Respiratory protection:</b>	If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.
<b>Eye/face protection:</b>	Wear chemical goggles; face shield (if splashing is possible).
<b>Skin protection:</b>	Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

## 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)
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.28 - 1.32 at 15.6 °C (60.08 °F)
<b>Vapor density:</b>	Not determined
<b>Flash point:</b>	Not applicable
<b>Flammable/Explosive limits - lower:</b>	Not applicable
<b>Flammable/Explosive limits - upper:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not applicable
<b>Solubility in water:</b>	Complete
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	Not applicable

## 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>Conditions to avoid:</b>	Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

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

Hazardous components	Health Effects/Target Organs
Phosphoric acid	Irritant, Corrosive
Manganese dihydrogen phosphate	Behavioral, Blood, Developmental, Irritant, Kidney, Lung, Mutagen, Nervous System, Reproductive, Respiratory
Manganese nitrate	Behavioral, Blood, Cardiac, Developmental, Irritant, Kidney, Liver, Lung, Mutagen, Nervous System, Reproductive, Respiratory, Vascular
Iron sulphate	Cardiac, Central nervous system, Corrosive, Gastrointestinal, Irritant, Kidney, Liver, Lung, Metabolic, Mutagen, Vascular
Nickel nitrate	Allergen, Blood, Cardiac, Central nervous system, Corrosive, Developmental, Immune system, Irritant, Kidney, Liver, Lung, Mutagen, Reproductive, Respiratory, Sensory, Some evidence of carcinogenicity, Vascular

## 12. ECOLOGICAL INFORMATION

Ecological information: No data available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

## 14. TRANSPORT INFORMATION

### 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 Reportable quantity: Nickel nitrate, Phosphoric acid

### 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 or are exempt from listing on the Toxic Substances Control Act Inventory.

IDH number: 594401

Product name: BONDERITE M-MN LUBRITE 5 MANGANESE PHOSPHATE known as PARCO LUBRITE 5

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

**CERCLA/SARA Section 302 EHS:** None above reporting de minimus  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA 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). Manganese dihydrogen phosphate (CAS# 18718-07-5). Manganese nitrate (CAS# 10377-66-9). Nickel nitrate (CAS# 13138-45-9).

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

**Canada Regulatory Information**

**CEPA DSL/NDL Status:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.  
**WHMIS hazard class:** D.2.A, D.2.B, E

**16. OTHER INFORMATION**

**This material safety data sheet contains changes from the previous version in sections:** Reviewed MSDS. Reissued with new date.

**Prepared by:** Regulatory Affairs

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