MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT : **BONDERITE M-MN Lubrite No.2**

DATE :
(MSDS date) **16.06.2022**

1. Manufacturer/Supplier :

PPS Industries Limited
86 Hugo Johnston Drive, Auckland
New Zealand
P.O.Box 12823, Penrose, Auckland 1642
Phone : 64 9 579-1001
Facsimile : 64 9 579-9497
Emergency Phone : 0800 657-894
Website: www.ppsindustries.co.nz

Emergency Information :

National Poison Centre	0800 764-766
Chemcall 24/7 Emergency Response Service :	0800 243-622

13. Disposal Considerations :

Product

Recommendation - Consult local or national regulations to ensure proper disposal.

Packaging

Disposal must be made according to official regulations.

16. Other Information :

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Safety Data Sheet

BONDERITE M-MN LUBRITE 2 MANGANESE PHOSPHATE
known as Parco Lubrite No.2 32Kg

SDS No. : 154246
V001.2
Revision: 16.06.2022
printing date: 14.09.2023

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: BONDERITE M-MN LUBRITE 2 MANGANESE PHOSPHATE known as Parco Lubrite No.2 32Kg

Intended use: Phosphating Products for Metals

Supplier:

Henkel New Zealand Ltd
2 Allens Rd
Auckland, 2013
New Zealand
Phone: +64 (9) 272-6710

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).
Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

GHS Classification:

Hazard Class	Hazard Category
Corrosive to metals	Category 1
Skin irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1
Carcinogenicity	Category 1A
Carcinogenicity	Category 1B
Toxic to reproduction	Category 1B
Target Organ Systemic Toxicant - Repeated exposure	Category 2
Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

Hazard pictogram:

Signal word: Danger

Hazard statement(s):
H290 May be corrosive to metals.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H350 May cause cancer.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

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 mist/vapours.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Get immediate medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P390 Absorb spillage to prevent material damage.

Storage:
P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description: Mixture

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Manganese bis(dihydrogen phosphate)	18718-07-5	20- < 30 %
phosphoric acid	7664-38-2	5- < 10 %
Manganese nitrate	10377-66-9	1- < 10 %
nickel dinitrate	13138-45-9	0.3- < 1 %
non hazardous ingredients~		30- <= 60 %

SECTION 4 FIRST AID MEASURES

Ingestion:
Do not induce vomiting.
Have victim rinse mouth thoroughly with water.
Seek medical advice.

Skin:
In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water.
Immediate medical treatment necessary.

Eyes:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical treatment necessary.

Inhalation:	Immediately remove victim to fresh air. Keep warm and in a quiet place. Seek medical advice.
First Aid facilities:	Eye wash and safety shower Normal washroom facilities
Medical attention and special treatment:	Treat symptomatically.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Improper extinguishing media:	Water spray jet
Combustion behaviour:	Non-flammable (aqueous solution). In case of fire toxic gases can proceed after evaporation of water and further heating of the product.
Decomposition products in case of fire:	Irritating and toxic gases or fumes may be released during a fire. Oxides of nitrogen. Carbon monoxide. Carbon dioxide.
Particular danger in case of fire:	This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.
Special protective equipment for fire-fighters:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Additional fire fighting advice:	In case of fire, keep containers cool with water spray. Collect contaminated fire fighting water separately. It must not enter drains.
Hazchem code:	2R

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear protective equipment. Avoid skin and eye contact. Ensure adequate ventilation.
Environmental precautions:	Do not empty into drains / surface water / ground water. Do not allow product to enter sewer or waterways. Wear appropriate protective equipment and clothing during clean-up.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of contaminated material as waste according to Section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes, skin and clothing.
Avoid breathing vapors or mists of this product.
Ensure that workrooms are adequately ventilated.
For industrial use only.

Conditions for safe storage:

Store above 40 °F (5 °C).
Store in tightly closed containers. In a cool/well-ventilated area.
Isolate from incompatible substances.
Protect from freezing.
Keep container tightly sealed.
Must be stored in the facility for the dangerous goods

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Ceiling	STEL (ppm)	STEL (mg/m3)
MANGANESE FUME, DUST AND COMPOUNDS, AS MN 18718-07-5	Dust and fume.		0.2	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN, RESPIRABLE DUST	Respirable dust and/or fume.		0.02	-	-	-
PHOSPHORIC ACID 7664-38-2			1	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN 10377-66-9	Dust and fume.		0.2	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN, RESPIRABLE DUST	Respirable dust and/or fume.		0.02	-	-	-
NICKEL INORGANIC COMPOUNDS, RESPIRABLE DUST 13138-45-9	Respirable dust.		0.005	-	-	-
NICKEL INORGANIC COMPOUNDS			0.02	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN 18718-07-5	Dust and fume.		0.2	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN, RESPIRABLE DUST	Respirable dust and/or fume.		0.02	-	-	-
PHOSPHORIC ACID 7664-38-2			1	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN 10377-66-9	Dust and fume.		0.2	-	-	-
MANGANESE FUME, DUST AND COMPOUNDS, AS MN, RESPIRABLE DUST	Respirable dust and/or fume.		0.02	-	-	-
NICKEL INORGANIC COMPOUNDS, RESPIRABLE DUST 13138-45-9	Respirable dust.		0.005	-	-	-
NICKEL INORGANIC COMPOUNDS			0.02	-	-	-

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Manganese bis(dihydrogen phosphate) 18718-07-5	Manganese	Blood	Sampling time: End of shift at end of work week.	20 µg/l	DE BAT		

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.
Eye protection:	For eye protection, use tightly fitted safety goggles and a face-shield
Skin protection:	Use of impervious apron and boots are recommended. Suitable protective gloves. Neoprene gloves. Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced. Nitrile gloves.
Respiratory protection:	If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.
General protection measures:	Good industrial hygiene practices should be observed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	green clear
Odor:	odourless
pH:	< 1.0
Specific gravity:	1.29 - 1.37
Boiling point:	> 210 °F (> 98.9 °C)
Flash point: (HST-US 027F; Flash Point: Tag CC Pensky-Martens CC)	160 °C (320 °F)
Density:	1.29 - 1.37 g/cm3
Solubility in water:	Complete
VOC content (2004/42/EC)	0 % (2010/75/EU)

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of temperature and pressure.
Conditions to avoid:	None if used for intended purpose.
Incompatible materials:	This product may react with strong alkalies.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide. Carbon dioxide. Oxides of nitrogen. Chromium oxide.
Hazardous polymerization:	Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Health Effects:

Ingestion: If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.

Skin: Causes skin irritation.
Symptoms may include redness, burning, drying, cracking and skin burns.
May cause allergic skin reaction.

Eyes: Causes serious eye damage.
Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Inhalation: Inhalation of vapors may cause moderate to severe respiratory tract irritation.

Carcinogenicity: Category 1A (Carcinogen), May cause cancer.

Toxicity for reproduction: Toxic to reproduction, category 1B, May damage fertility or the unborn child.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Manganese bis(dihydrogen phosphate) 18718-07-5	LD50	> 2,000 mg/kg	oral		rat	OECD Guideline 420 (Acute Oral Toxicity)
phosphoric acid 7664-38-2	Acute toxicity estimate (ATE)	1,500 mg/kg	oral			Expert judgement
Manganese nitrate 10377-66-9	Acute toxicity estimate (ATE)	500 mg/kg	oral			Expert judgement
nickel dinitrate 13138-45-9	LD50 LC50	361.9 mg/kg 2.48 mg/l	oral inhalation	4 h	rat rat	OECD Guideline 423 (Acute Oral toxicity) not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Manganese bis(dihydrogen phosphate) 18718-07-5	not irritating	15 min		not specified
phosphoric acid 7664-38-2	corrosive	24 h	rabbit	not specified
Manganese nitrate 10377-66-9	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Manganese bis(dihydrogen phosphate) 18718-07-5	Category II	10 d	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
phosphoric acid 7664-38-2	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
phosphoric acid 7664-38-2	NOAEL=250 mg/kg	oral: gavage	6 wdaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

SECTION 12. ECOLOGICAL INFORMATION

General ecological information: Do not empty into drains / surface water / ground water.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Manganese bis(dihydrogen phosphate) 18718-07-5	LC50	2,490 mg/l	Fish	48 h	Ide, silver or golden orfe (Leuciscus idus)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Manganese bis(dihydrogen phosphate) 18718-07-5	EC50	15.66 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Manganese bis(dihydrogen phosphate) 18718-07-5	NOEC	9.9 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Manganese bis(dihydrogen phosphate) 18718-07-5	EC50	> 20 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
phosphoric acid 7664-38-2	LC50	> 100 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
phosphoric acid 7664-38-2	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
phosphoric acid 7664-38-2	EC50	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
phosphoric acid 7664-38-2	NOEC	100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
phosphoric acid 7664-38-2	IC50	270 mg/l	Bacteria	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Manganese nitrate 10377-66-9	LC50	49.9 mg/l	Fish	96 h	Salmo trutta	not specified
Manganese nitrate 10377-66-9	EC50	> 115 mg/l	Daphnia		Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Manganese nitrate 10377-66-9	EC50	66 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Manganese nitrate 10377-66-9	NOEC	1.08 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Manganese nitrate 10377-66-9	EC0	10.6 mg/l	Bacteria	30 min		not specified
nickel dinitrate 13138-45-9	NOEC	104 µg/l	Fish		Oncorhynchus mykiss	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
nickel dinitrate 13138-45-9	LC50	8.1 mg/l	Fish	96 h	Lepomis gibbosus	OECD Guideline 203 (Fish, Acute Toxicity Test)
nickel dinitrate 13138-45-9	EC50	0.915 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
nickel dinitrate 13138-45-9	EC50	0.284 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal of product: Dispose of as hazardous waste in compliance with local and national regulations. Do not allow product to enter sewer or waterways.

Disposal for uncleaned package: Collection and delivery to recycling enterprise or other registered elimination institution.

SECTION 14. TRANSPORT INFORMATION

Dangerous Goods information:

Land Transport:
Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

Land Transport:

UN no.:	1805
Proper shipping name:	PHOSPHORIC ACID SOLUTION
Class or division:	8
Packing group:	III
Hazchem code:	2R

Marine transport IMDG:

UN no.:	1805
Proper shipping name:	PHOSPHORIC ACID SOLUTION
Class or division:	8
Packing group:	III
EmS:	F-A ,S-B
Seawater pollutant:	-

Air transport IATA:

UN no.:	1805
Proper shipping name:	Phosphoric acid, solution
Class or division:	8
Packing group:	III
Packing instructions (passenger)	852
Packing instructions (cargo)	856

SECTION 15. REGULATORY INFORMATION

New Zealand regulatory information:
Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

HSNO Approval Number: HSR002610

Approved Handler: Refer to the certified handler requirements in the Health and Safety at Work (Hazardous Substances) Regulations 2017

Site and Storage: Refer to the site and storage requirements for this Group Standard. Refer to the HSNO controls for approved hazardous substances.

NZIoC: Compliant for NZIOC

SECTION 16. OTHER INFORMATION

Abbreviations/acronyms:

STEL - Short term exposure limit
TWA - Time weighted average
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
HSNO - Hazardous Substances and New Organisms

Reason for issue:

Reviewed SDS. Reissued with new date. involved chapters: 1 - 16

Date of previous issue:

01.06.2017

Disclaimer:

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel New Zealand Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel New Zealand Limited concerning the properties of the material.
The information contained in this Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel New Zealand Limited assumes no legal responsibility for reliance upon same. Henkel New Zealand Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet.
This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by Government statutes. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use.
No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.