



your partner in food safety

Safety Data Sheet

Issue Date: 31-Oct-2018

Revision Date: 20-Nov-2018

Version 1

1. IDENTIFICATION

Product identifier

Product Name Mare

Other means of identification

SDS # BIR-050

Product Code I00179

Recommended use of the chemical and restrictions on use

Recommended Use Emulsification, dispersion, and water hardness control additive for trolley cleaning and blend on site applications.

Details of the supplier of the safety data sheet

Supplier Address

Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027
www.birkocorp.com

Emergency telephone number

Company Phone Number Phone: 303-289-1090 or 1-800-525-0476

Fax: 303-289-1190

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Appearance Clear to light amber liquid

Physical state Liquid

Odor Odorless

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Signal Word

Danger

Hazard statements

Causes skin irritation

Causes serious eye damage



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Tetrapotassium pyrophosphate	7320-34-5	20-25
Potassium hydroxide	1310-58-3	1-5
Tetrasodium EDTA	64-02-8	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**Description of first aid measures**

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin Contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes skin irritation. Causes serious eye damage.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/eye protection/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Odorless
Appearance	Clear to light amber liquid	Odor Threshold	Not determined
Color	Clear to light amber		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	11.1		
Melting point / freezing point	Not determined		
Boiling point / boiling range	Not determined		
Flash point	Not determined		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-Not applicable		
Flammability Limit in Air			
Upper flammability or explosive limits	Not determined		
Lower flammability or explosive limits	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	1.43		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Not determined		
Decomposition temperature	Not determined		
Kinematic viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye damage.
Skin Contact	Causes skin irritation.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrapotassium pyrophosphate 7320-34-5	-	> 4640 mg/kg (Rabbit)	-
Sodium Tripolyphosphate Anhydrous 7758-29-4	= 3120 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Potassium Silicate 1312-76-1	= 5700 mg/kg (Rat)	-	-
Gluconic Acid 526-95-4	= 7630 mg/kg (Rat)	-	-
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Tetrasodium EDTA 64-02-8	= 1658 mg/kg (Rat) = 10 g/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
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Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	7,629.10 mg/kg
Dermal LD50	15,269.34 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Tetrapotassium pyrophosphate 7320-34-5		100: 96 h Oncorhynchus mykiss mg/L LC50	100: 48 h water flea mg/L EC50
Sodium Tripolyphosphate Anhydrous 7758-29-4		1650: 48 h Leuciscus idus mg/L LC50	
Potassium Silicate 1312-76-1		301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi- static	216: 96 h Daphnia magna mg/L EC50
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static	
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales	610: 24 h Daphnia magna mg/L EC50

		promelas mg/L LC50 static	
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Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Potassium hydroxide	0.65
1310-58-3	0.83

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods**Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Potassium hydroxide	Toxic
1310-58-3	Corrosive

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/E Lincs	ENCS	IECSC	KECL	PICCS	AICS
Tetrapotassium pyrophosphate	X	X	X	X	X	X	X	X
Sodium Tripolyphosphate Anhydrous	X	X	X	X	X	X	X	X
Potassium Silicate	X	X	X	X	X	X	X	X
Gluconic Acid	X	X	X	X	X	X	X	X
Sodium gluconate	X	X	X	X	X	X	X	X
Potassium hydroxide	X	X	X	X	X	X	X	X

Tetrasodium EDTA	X	X	X	X	X	X	X	X
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Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances**AICS - Australian Inventory of Chemical Substances***US Federal Regulations****CERCLA**

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	0	0	-
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	2	0	0	C

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Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet