



a xylem brand

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SAFETY DATA SHEET PHOSPHATE LR No. 1 TABLETS

1. Identification

Product identifier

Product name PHOSPHATE LR No. 1 TABLETS

Product number YAP177, YPM177

Internal identification X-177

Recommended use of the chemical and restrictions on use

Application Testing water

Details of the supplier of the safety data sheet

Supplier PALINTEST USA
1455 JAMIKE AVENUE
ERLANGER
KENTUCKY
41018
USA
859 341 7423
TOLL FREE 800 835 9629
859 341 2106
info@palintestusa.com

DISTRIBUTOR: YSI, INC
ADDRESS 1700/1725 BRANNUM LANE
YELLOW SPRINGS,
OHIO
45387
USA
TELEPHONE (937) 767-7241
E-MAIL MSDSINFO@XYLEMINC.COM

Emergency telephone number

Emergency telephone +44 (0)207 858 1228 (24hr)

National emergency telephone number +44 (0)207 858 1228 (24hr)

Emergency telephone number: Chemtrec® :
US & Canada) 800-424-9300
(International) +1 (703) 527-3887

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

Environmental hazards Not Classified

Label elements

Pictogram



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

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Precautionary statements	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a poison center/doctor if you feel unwell.</p>
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Contains POTASSIUM HYDROGENSULPHATE

Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Mixtures

POTASSIUM HYDROGENSULPHATE	60-80%
CAS number: 7646-93-7	REACH registration number: N/A
Classification	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	
ADIPIC ACID	15-20%
CAS number: 124-04-9	REACH registration number: 01-2119457561-38-XXXX
Classification	
Eye Irrit. 2 - H319	
BORIC ACID	<5.5%
CAS number: 10043-35-3	REACH registration number: 01-2119486683-25-XXXX
Classification	
Repr. 1B - H360FD	

The Full Text for all Hazard Statements are Displayed in Section 16.

Composition comments The Data Shown is in accordance with the latest EC Directives.

4. First-aid measures

Description of first aid measures

Inhalation	Unlikely route of exposure as the product does not contain volatile substances.
Ingestion	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention.
Skin Contact	Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

Most important symptoms and effects, both acute and delayed

Inhalation This is unlikely to occur but symptoms similar to those of ingestion may develop.

Ingestion May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact Burns can occur.

Eye contact May cause blurred vision and serious eye damage.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Hazardous combustion products No known hazardous decomposition products.

Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage

Precautions for safe handling

Usage precautions Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Keep separate from food, feedstuffs, fertilizers and other sensitive material.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

PHOSPHATE LR No. 1 TABLETS

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

ADIPIIC ACID

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³

BORIC ACID

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³

Short-term exposure limit (15-minute): ACGIH 6 mg/m³

A4

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

Ingredient comments No exposure limits known for ingredient(s).

ADIPIIC ACID (CAS: 124-04-9)

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gloves made of the following material: Nitrile rubber.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Solid
Color	White.
Odor	Odorless.
Solubility(ies)	Soluble in water.
Other information	No data available.

10. Stability and reactivity

Reactivity There are no known reactivity hazards associated with this product.

Stability Stable under the prescribed storage conditions.

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Possibility of hazardous reactions	No data available.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Heating may generate the following products: Toxic and corrosive gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects	No data available.
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12. Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
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Toxicity

Toxicity	No data available.
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Persistence and degradability

Persistence and degradability	There are no data on the degradability of this product.
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Bioaccumulative potential

Bio-Accumulative Potential	No data available on bioaccumulation.
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Mobility in soil

Mobility	The product is soluble in water.
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Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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Other adverse effects

Other adverse effects	No data available.
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13. Disposal considerations

Waste treatment methods

Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
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14. Transport information

Road transport notes	The product is not classified as packaged as per ADR 2013 section 3.5.1.4
Sea transport notes	The product is not classified as packaged as per IMDG 2012 section 3.5.1.4
Air transport notes	The product is not subject to the requirements of IATA as packaged based upon "De Minimis Quantities" as per IATA Dangerous Goods Regulations (54th edition) subsection 2.6.10.1
<u>UN Number</u>	
UN No. (DOT)	2509

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UN No. (IMDG) 2509
 UN No. (ICAO) 2509
UN proper shipping name
 Proper shipping name (DOT) POTASSIUM HYDROGEN SULPHATE
 Proper shipping name (IMDG) POTASSIUM HYDROGEN SULPHATE
 Proper shipping name (ICAO) POTASSIUM HYDROGEN SULPHATE

Transport hazard class(es)

DOT hazard class 8
 DOT hazard label Corrosive
 TDG class 8
 TDG label 8
 IMDG Class 8
 IMDG subsidiary risk
 ICAO class/division 8
 ICAO subsidiary risk

Transport labels

Packing group

DOT pack group II
 IMDG packing group II
 ICAO packing group II

Environmental hazards**Environmentally Hazardous Substance**

No.

Special precautions for user

EmS F-A, S-B

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory informationUS Federal Regulations**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

PHOSPHATE LR No. 1 TABLETS

CAA Accidental Release Prevention

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

Massachusetts "Right To Know" List

ADIPIIC ACID

POTASSIUM ANTIMONY TARTRATE

Rhode Island "Right To Know" List

ADIPIIC ACID

Minnesota "Right To Know" List

ADIPIIC ACID

New Jersey "Right To Know" List

POTASSIUM HYDROGENSULPHATE

ADIPIIC ACID

POTASSIUM ANTIMONY TARTRATE

Pennsylvania "Right To Know" List

ADIPIIC ACID

POTASSIUM ANTIMONY TARTRATE

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

SODIUM HYDROGEN CARBONATE

POTASSIUM HYDROGENSULPHATE

ADIPIIC ACID

BORIC ACID

ASCORBIC ACID

US - TSCA 12(b) Export Notification

None of the ingredients are listed.

16. Other information

Issued by	L. Morgan
Revision date	5/21/2015
Revision	8
Supersedes date	3/9/2014
SDS status	Approved.

PHOSPHATE LR No. 1 TABLETS

Hazard statements in full

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H360FD May damage fertility if swallowed. May damage the unborn child if swallowed.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



a xylem brand

YSI sells this product under agreement with the original manufacturer. YSI assumes no legal liability or responsibility for the accuracy, completeness or usefulness of any information set forth in this MSDS.

SAFETY DATA SHEET PHOSPHATE LR No. 2 TABLETS

1. Identification

Product identifier

Product name PHOSPHATE LR No. 2 TABLETS

Product number YAP177, YPM177

Internal identification X-178

Recommended use of the chemical and restrictions on use

Application Testing water

Details of the supplier of the safety data sheet

Supplier PALINTEST USA
1455 JAMIKE AVENUE
ERLANGER
KENTUCKY
41018
USA
859 341 7423
TOLL FREE 800 835 9629
859 341 2106
info@palintestusa.com

DISTRIBUTOR: YSI, INC
ADDRESS 1700/1725 BRANNUM LANE
YELLOW SPRINGS,
OHIO
45387
USA
TELEPHONE (937) 767-7241
E-MAIL MSDSINFO@XYLEMINC.COM

Emergency telephone number

Emergency telephone +44 (0)207 858 1228 (24hr)

National emergency telephone number +44 (0)207 858 1228 (24hr)

Emergency telephone number: Chemtrec® :
US & Canada) 800-424-9300
(International) +1 (703) 527-3887

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Eye Dam. 1 - H318

Environmental hazards Not Classified

Human health May irritate eyes and skin.

Label elements

Pictogram



PHOSPHATE LR No. 2 TABLETS

Signal word	Danger
Hazard statements	H318 Causes serious eye damage.
Precautionary statements	P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a poison center/doctor.
Contains	SODIUM METABISULPHITE

Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Mixtures

SODIUM CHLORIDE		60-80%
CAS number: 7647-14-5	REACH registration number: 01-2119485491-33-XXXX	
Classification Not Classified		
SODIUM METABISULPHITE		10-30%
CAS number: 7681-57-4	REACH registration number: 01-2119531326-45-XXXX	
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318		
ADIPIC ACID		10-30%
CAS number: 124-04-9	REACH registration number: 01-2119457561-38-XXXX	
Classification Eye Irrit. 2 - H319		
AMMONIUM MOLYBDATE		5-10%
CAS number: 12054-85-2	REACH registration number: N/A	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335		

PHOSPHATE LR No. 2 TABLETS

BORIC ACID		<5.5%
CAS number: 10043-35-3	REACH registration number: 01-2119486683-25-XXXX	
Classification Repr. 1B - H360FD		

The Full Text for all Hazard Statements are Displayed in Section 16.

Composition comments The Data Shown is in accordance with the latest EC Directives.

4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Skin Contact	Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

Most important symptoms and effects, both acute and delayed

Inhalation	This is unlikely to occur but symptoms similar to those of ingestion may develop.
Ingestion	Chemical burns.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause severe eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

PHOSPHATE LR No. 2 TABLETS

Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used. However, large or frequent spills may have hazardous effects on the environment.

Methods and material for containment and cleaning up

Methods for cleaning up No specific clean-up procedure recommended.

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage

Precautions for safe handling

Usage precautions Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Keep separate from food, feedstuffs, fertilizers and other sensitive material.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

SODIUM CHLORIDE

Long-term exposure limit (8-hour TWA): ACGIH
Short-term exposure limit (15-minute): ACGIH 2 mg/m³

SODIUM METABISULPHITE

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³
A4

ADIPIC ACID

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³

AMMONIUM MOLYBDATE

Long-term exposure limit (8-hour TWA): ACGIH 0,5 mg/m³
Short-term exposure limit (15-minute): ACGIH

BORIC ACID

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³
Short-term exposure limit (15-minute): ACGIH 6 mg/m³
A4

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

Ingredient comments Due to the hazardous nature of ingredients, exposure should be minimal. WEL = Workplace Exposure Limits

ADIPIC ACID (CAS: 124-04-9)

Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

PHOSPHATE LR No. 2 TABLETS

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber.

Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Solid
Color	White.
Odor	Odorless.
Solubility(ies)	Soluble in water.
Other information	Not known.

10. Stability and reactivity

Reactivity	Generates toxic gas in contact with acid.
Stability	Stable under the prescribed storage conditions.
Possibility of hazardous reactions	Generates toxic gas in contact with acid.
Conditions to avoid	Avoid contact with acids.
Materials to avoid	Avoid contact with acids.
Hazardous decomposition products	No data available.

11. Toxicological information

Information on toxicological effects

Toxicological effects	No data available.
<u>Acute toxicity - oral</u>	
ATE oral (mg/kg)	5,049.48495253

12. Ecological Information

PHOSPHATE LR No. 2 TABLETS

Ecotoxicity There are no data on the ecotoxicity of this product. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Toxicity

Toxicity No data available.

Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Mobility in soil

Mobility The product is soluble in water.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

UN Number

Not applicable.

UN No. (IMDG)

UN No. (ICAO)

UN proper shipping name

Not applicable.

Transport hazard class(es)

IMDG Class

IMDG subsidiary risk

ICAO class/division

ICAO subsidiary risk

Transport labels

Packing group

Not applicable.

PHOSPHATE LR No. 2 TABLETS

DOT pack group

IMDG packing group

ICAO packing group

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

EmS

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US Federal Regulations

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

SODIUM CHLORIDE

1,000 lbs (454 Kg)

ADIPIC ACID

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

Massachusetts "Right To Know" List

SODIUM CHLORIDE

SODIUM METABISULPHITE

ADIPIC ACID

Rhode Island "Right To Know" List

SODIUM CHLORIDE

SODIUM METABISULPHITE

ADIPIC ACID

Minnesota "Right To Know" List

SODIUM CHLORIDE

SODIUM METABISULPHITE

ADIPIC ACID

PHOSPHATE LR No. 2 TABLETS**AMMONIUM MOLYBDATE****New Jersey "Right To Know" List****SODIUM CHLORIDE****SODIUM METABISULPHITE****ADIPIIC ACID****Pennsylvania "Right To Know" List****SODIUM CHLORIDE****SODIUM METABISULPHITE****ADIPIIC ACID****Inventories****Canada - DSL/NDSL****SODIUM CHLORIDE****SODIUM METABISULPHITE****ADIPIIC ACID****BORIC ACID****US - TSCA****SODIUM CHLORIDE****SODIUM METABISULPHITE****ADIPIIC ACID****BORIC ACID****US - TSCA 12(b) Export Notification**

None of the ingredients are listed.

16. Other information

Issued by	L. Morgan
Revision date	5/12/2015
Revision	6
Supersedes date	9/3/2014
SDS status	Approved.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H360FD May damage fertility if swallowed. May damage the unborn child if swallowed.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.