Revision date: 04/08/2015 *Version: 1.0*

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name/designation:	Phosphoric Acid 85%
Product No.:	BDH3050-19L BDH3052-56L BDH3054-207L BDH3056-19L BDH3058-56L BDH3060-199L BDH3062-19L BDH3064-56L BDH3066-188L BDH3104-2.5LPC BDH3118-3.8LP TX305019LDAD
Other means of identification: Orthophosphoric acid	

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Manufacturing and Laboratory use

1.3. Details of the supplier of the safety data sheet

Company VWR International, LLC
Radnor Corporate Center
100 Matsonford Road
Radnor, PA 19087-8660
Telephone 610.386.1700

1.4. Emergency Telephone number

CHEMTREC 800.424.9300
CANUTEC 613.996.6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

For the full text of the H-Statement(s) and R-phrase(s) mentioned in this Section, see Section 16.

Hazard classes and hazard categories	Hazard statements
Corrosive to metals; Category 1	May be corrosive to metals
Skin corrosion; Category 1A	Causes severe skin burns and eye damage
Serious eye damage; Category 1	Causes serious eye damage
Acute toxicity, Oral; Category 4	Harmful if swallowed
Acute toxicity, Dermal; Category 5	May be harmful in contact with skin

2.2. GHS Label elements, including precautionary statements

Pictograms 

Signal word Danger

Hazard statements	
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

Precautionary statements	
P234	Keep only in original container.
P260	Do not breathe dusts or mists.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face 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. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/physician.
P363	Wash contaminated clothing before reuse.
P390	Avoid spillage to prevent material damage.

P405	Store locked up.
P406	Store in corrosive resistant container with a resistant liner.
P501	Dispose of contents/container in accordance with local regulations.

2.3. WHIMS Classification

Class E: Corrosive material

2.4. Hazards not otherwise classified (HNOC) or not covered by GHS or WHIMS

Not Available

SECTION 3: Composition / information on ingredients

3.1. Hazard components

Chemical name	Formula	Molecular weight	CAS#	Weight%
Phosphoric Acid	H_3PO_4	98.00 g/mol	7664-38-2	85

SECTION 4: First aid measures

4.1. General information

In case of inhalation

Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respirations.

In case of skin contact

Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.

In case of eye contact

Immediately rinse with plenty of water for at least 15 minutes and seek medical attention.

In case of ingestion

Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

May cause deep, penetrating ulcers of the skin. Contact with skin may cause inflammation. Contact to eyes may cause severe burns and possible irreversible eye damage including corneal injury and cataracts. Inhalation may cause coughing burns and breathing difficulty. Ingestion

may cause burns, swelling of the lips, mouth, and larynx, throat constriction, nausea, vomiting, convulsions, shock, and may cause severe and permanent damage to gastrointestinal tract.

4.3. Indication of any immediate medical attention and special treatment needed

Not Available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool unopened containers with water.

5.2. Special hazards arising from the substance or mixture

Not Available

5.3. Special protective equipment for firefighters

Not Available

5.4. Hazardous combustion products

Not Available

5.5. Advice for firefighters

Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

5.6. Additional information

Not Available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for recommendations on the use of personal protective equipment.

6.2. Environmental precautions

Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

6.3. Methods and material for containment and cleaning up

Neutralize spill. Absorb spill with inert absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

6.4. Additional information

Not Available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

7.3. Specific end use(s)

Not Available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Phosphoric Acid	1 mg/m^3	TLV	ACGIH
	3 mg/m^3	STEL	ACGIH
	1 mg/m^3	PEL	OSHA
	1 mg/m^3	REL	NIOSH
	3 mg/m^3	STEL	NIOSH
	1000 mg/m^3	IDLH	OSHA

8.2. Exposure controls

Appropriate engineering controls

Showers
Eye wash stations
Ventilation system

Personal protection equipment

Eye/face protection

Safety glasses or goggles with face shield

Skin protection

Nitrile or rubber gloves and full body protection

Respiratory protection

Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

a)	Appearance:	
	Physical state	Syrupy, viscous liquid
	Color	Clear, colorless
b)	Odor	Not Available
c)	Odor Threshold	Not Available
d)	pH	Not Available
e)	Melting point/ freezing point	40°C (104°F)
f)	Initial boiling point and boiling range	158°C (316°F)
g)	Flash point	Not Available
h)	Evaporation rate	Not Available
i)	Flammability (solid, gas)	Not Available
j)	Upper/lower flammability or explosive limits	Not Available
k)	Vapor pressure	Not Available
l)	Vapor density	Not Available
m)	Relative density	1.69
n)	Solublities	Not Available
o)	Partition coefficient (n-Octanol/Water)	Not Available
p)	Auto-ignition temperature	Not Available
q)	Decomposition temperature	
r)	Viscosity	Not Available

s) Explosive properties Not Available
t) Oxidizing properties Not Available

9.2. Other information

Not Available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not Available

10.2. Chemical stability

Stable under normal storage conditions

10.3. Possibility of hazardous reactions

Not Available

10.4. Conditions to avoid

Not Available

10.5. Incompatible materials

Strong bases, powdered metals

10.6. Hazardous decomposition products

Not Available

SECTION 11: Toxicology

11.1. Information on toxicological effects

Acute toxicity

Oral LD_{50} – rat – 1,530 mg/kg
Inhalation LC_{50}
Dermal LD_{50} – rabbit – 2,740 mg/kg
Other information on acute toxicity

Skin corrosion/irritation

Not Available

Serious eye damage/eye irritation

Not Available

Respiratory or skin sensitization
Not Available

Germ cell mutagenicity
Not Available

Carcinogenicity
Not Available

Reproductive toxicity
Not Available

Specific target organ toxicity-single exposure
Not Available

Specific target organ toxicity-repeated exposure
Not Available

Aspiration hazard
Not Available

Additional information
Not Available

SECTION 12: Ecological information

12.1. Ecotoxicity
Not Available

12.2. Persistence and degradability
Not Available

12.3. Bioaccumulative potential
Not Available

12.4. Mobility in soil
Not Available

12.5. Results of PBT and vPvB assessment
Not Available

12.6. Other adverse effects

Not Available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land Transport DOT (U.S.)

UN Number 1805

Proper Shipping name Phosphoric acid solution

Transport Hazard Classes

Class 8

Hazard Label(s) 8

Packing Group III

Environmental hazard(s)

Special precautions for user

Sea Transport IMDG

UN Number 1805

Proper Shipping name Phosphoric acid solution

Transport Hazard Classes

Class 8

Hazard Label(s) 8

EMS- No. F-A, S-B

Packing Group III

Environmental hazard(s)

Segregration Group

Special precautions for user

Air Transport IATA

UN Number 1805

Proper Shipping name Phosphoric acid solution

Transport Hazard Classes

Class 8

Hazard Label(s) 8

Packing Group III

Environmental hazard(s)

Special precautions for user

SECTION 15: Regulatory information

OSHA Hazards

Corrosive, Toxic by ingestion

SARA 302 Extremely Hazardous Substances

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 (TRI reporting)

Ammonium Hydroxide

SARA 311/312 Hazardous Chemicals

Acute Health Hazard

Massachusetts Right-To-Know Substance List

Ammonium Hydroxide

Pennsylvania Right-To-Know Hazardous substances

Ammonium Hydroxide

Water

New Jersey Worker and Community Right-To-Know Components

Ammonium Hydroxide

Water

California Propostion 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Inventory status:
Canada DSL Inventory List: Listed
US TSCA Inventory List: Listed
EINECS, ELINCS or NLP: 215-633-2

SECTION 16: Other information

Full text of H-Statement(s) and R-phrase(s)

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H313 May be harmful if in contact with skin.
H314 Causes severe skin burns and eye damage.

R34 Causes burns.

Canadian Carcinogenicity hazard class
PHNOC hazard class
HHNOC hazard class
Biohazardous Infectious Materials hazard class

NFPA Rating:
Health: 3
Flammability: 0
Reactivity: 0
Special Hazard:

DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does

not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.