

**FILA Chemicals USA**

Revision nr. 5

Dated 09/26/2019

**DETERDEK**

Printed on 09/26/2019

Page n. 1/14

Replaced revision 4 (Dated 06/05/2019)

## Safety data sheet according to U.S.A. Federal Hazcom 2012

### 1. Identification

**1.1. Product identifier**

Product name

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

Intended use

**Acid descaling floor cleaning.****Identified Uses****Industrial****Professional****Consumer**

Uses

**1.3. Details of the supplier of the safety data sheet**

Name

**Fila Chemicals USA**

Full address

**10800 NW 21st St Ste # 170**

District and Country

**Miami, FL 33172****Tel. (305) 513-0708****Fax. (305) 513-0728**e-mail address of the competent person  
responsible for the Safety Data Sheet**sds@filasolutions.com****1.4. Emergency telephone number**

For urgent inquiries refer to

**800-424-9300 CHEMTREC**

### 2. Hazards identification

**2.1. Classification of the substance or mixture**

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Hazard pictograms:

Skin corrosion, category 1

Causes severe skin  
burns and eye  
damage.

Serious eye damage, category 1

Causes serious eye  
damage.



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Signal words: Danger

### Hazard statements:

**H314** Causes severe skin burns and eye damage.

### Precautionary statements:

#### Prevention:

**P260** Do not breathe dust / fume / gas / mist / vapours / spray.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P264** Wash hands thoroughly after handling.

#### Response:

**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**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.  
**P310** Immediately call a POISON CENTER / doctor / . . .  
**P304+P340** IF INHALED: remove person to fresh air and keep comfortable for breathing.  
**P363** Wash contaminated clothing before reuse.

#### Storage:

**P405** Store locked up.

#### Disposal:

**P501** Dispose of contents / container in accordance with local/regional/national/international regulation.

### 2.2. Other hazards

Information not available

## 3. Composition/information on ingredients


### 3.1. Substances

Information not relevant

### 3.2. Mixtures

#### Contains:

Identification	x = Conc. %	Classification:	Trade Secret:
<b>PHOSPHORIC ACID</b>			
CAS 7664-38-2	$22 \leq x < 24$	Substance or mixture corrosive to metals, category 1 H290, Skin corrosion, category 1B H314, Serious eye damage, category 1 H318	§
EC 231-633-2			
INDEX 015-011-00-6			
<b>Alcohols, C12-14, ethoxylates</b>			
CAS 68439-50-9	$1 \leq x < 1.5$	Acute toxicity, category 4 H302, Serious eye damage, category 1 H318, Hazardous to the aquatic environment, chronic toxicity, category 3 H412	§
EC			
INDEX -			

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Note: Upper limit is not included into the range.

§ the exact percentage (concentration) of composition has been withheld as a trade secret.

The full wording of the hazard (H) phrases is given in section 16 of the sheet.

## 4. First-aid measures

### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Causes severe skin burns and eye damage.

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

Information not available

## 5. Fire-fighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.


### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

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## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

### 7.3. Specific end use(s)


Information not available

## 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

USA	NIOSH-REL	NIOSH publication No. 2005-149, 3th printing, 2007.
USA	OSHA-PEL	Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2018

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## PHOSPHORIC ACID

### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH	-	1		3	
OEL	EU	1		2	
OSHA	USA	1			
CAL/OSHA	USA	1		3	
NIOSH	USA	1		3	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations.

#### HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

For the final choice of material for work gloves, the following must be considered: compatibility, degradation, breakage time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. Gloves have a wear time that depends on the duration and method of use

Chemical resistant gloves are recommended. Viton, minimum thickness 0.71 mm or a material with protective barrier with high performance level for continuous contact conditions, minimum permeation / rupture in 480 minutes according to the OSHA 29 CFR 1910.138 standards.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties



## DETERDEK

Appearance	liquid
Colour	transparent
Odour	Typical prinkly smell with floral fragrance
Odour threshold	Not available
pH	1
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	>199.40°F (> 93 °C)
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	not applicable
Oxidising properties	not applicable

**9.2. Other information**

Information not available

**10. Stability and reactivity****10.1. Reactivity**


There are no particular risks of reaction with other substances in normal conditions of use.

**PHOSPHORIC ACID**

Decomposes at temperatures above 200°C/392°F.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

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### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane. May react dangerously with: alkalis, sodium borohydride.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials

None.

PHOSPHORIC ACID

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.

### 10.6. Hazardous decomposition products

Due to thermal decomposition or in case of fire, gases and vapors can be released that are potentially harmful to health.

PHOSPHORIC ACID

May develop: phosphoryl oxides.

## 11. Toxicological information

### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects



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### DETERDEK

Information not available

#### ACUTE TOXICITY

##### PHOSPHORIC ACID

LD50 (Oral) 1530 mg/kg Rat

LD50 (Dermal) 2740 mg/kg Rabbit

LC50 (Inhalation) > 0.85 mg/l/1h Rat

#### SKIN CORROSION / IRRITATION

Corrosive for the skin

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class





## DETERDEK

## 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

### 12.1. Toxicity

Information not available

### 12.2. Persistence and degradability

#### PHOSPHORIC ACID

Solubility in water > 850000 mg/l

Degradability: information not available

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

Information not available

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6. Other adverse effects

Information not available

## 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 14. Transport information

These goods must be transported by vehicles authorized to transport hazardous materials according to the provisions set out in the current regulations of the U.S. DOT, Canadian TDG, the IMDG and IATA.

### Rail and Truck Shipments

DOT Shipping Name:

PHOSPHORIC ACID SOLUTION

DOT ID Number

UN 1805

DOT Hazard Class & Packing

8 Corrosive Packing Group III



## DETERDEK

**Group**  
**DOT Shipping Label** Corrosive  
May be shipped as consumer commodity

**TDG Shipping Name:** PHOSPHORIC ACID, LIQUID  
**TDG ID Number** UN 1805  
**TDG DOT Hazard Class & Packing** 8 Corrosive Packing Group III  
**Group**  
**TDG Shipping Label** Corrosive

**Water Shipments**

**IMO Shipping Name:** PHOSPHORIC ACID SOLUTION  
**IMO ID Number** UN 1805  
**IMO DOT Hazard Class & Packing** 8 Corrosive Packing Group III  
**Group**  
**IMO Shipping Label** Corrosive  
**IMO EMS** F-A, S-B

**Air Shipments**

**IATA Shipping Name:** PHOSPHORIC ACID SOLUTION  
**IATA ID Number** UN 1805  
**IATA DOT Hazard Class & Packing** 8 Corrosive Packing Group III  
**Group**  
**IATA Shipping Label** Corrosive  
**IATA Packing Instructions** Cargo: 856 Maximum quantity: 60 L  
Passenger: 852 Maximum quantity: 5 L  
Y841 Maximum quantity: 1 L (limited quantity)

## 15. Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal RegulationsTSCA:

All components are listed on TSCA Inventory.

Clean Air Act Section 112(b):

7664-38-2

PHOSPHORIC ACID (Phosphorous compounds)

Clean Air Act Section 602 Class I Substances:

No component(s) listed.


Clean Air Act Section 602 Class II Substances:

No component(s) listed.

Clean Water Act –  
Priority Pollutants:

No component(s) listed.

Clean Water Act –

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Toxic Pollutants:

No component(s) listed.

DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

DEA List II Chemicals (Essential Chemicals):

No component(s) listed.

EPA List of Lists:

313 Category Code:  
No component(s) listed.

EPCRA 302 EHS TPQ:

No component(s) listed.

EPCRA 304 EHS RQ:

No component(s) listed.

CERCLA RQ:

7664-38-2

PHOSPHORIC ACID (Phosphorous compounds)

EPCRA 313 TRI:

No component(s) listed.

RCRA Code:

No component(s) listed.

CAA 112 (r) RMP TQ:

No component(s) listed.

State Regulations

Massachusetts:

7664-38-2


PHOSPHORIC ACID (Phosphorous compounds)

Minnesota:

7664-38-2

PHOSPHORIC ACID (Phosphorous compounds)

New Jersey:

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7664-38-2 PHOSPHORIC ACID (Phosphorous compounds)

New York:

7664-38-2 PHOSPHORIC ACID (Phosphorous compounds)

Pennsylvania:

7664-38-2 PHOSPHORIC ACID (Phosphorous compounds)

California:

7664-38-2 PHOSPHORIC ACID (Phosphorous compounds)

Proposition 65:

International Regulations

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Canadian WHMIS

Information not available


## 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>H290</b>	May be corrosive to metals.
<b>H302</b>	Harmful if swallowed.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

### LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008

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- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

#### GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachusetts 105 CMR Department of public health 670.000: "Right to Know"
- Minnesota Chapter 5206 Department Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.


The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

MSDS are subject to change without notice.

#### Changes to previous review:

The following sections were modified:

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